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Tongass National Forest

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Gravina Island Timber Sale

Final Environmental Impact Statement

Volume II: Appendices

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THE UNIVERSITY OF CHICAGO

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Appendix A

**Reasons for Scheduling the
Environmental Analysis of the
Gravina Island Project Area
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CHAPTER 10

THEORY OF THE EARTH AND ITS HISTORY
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Appendix A

Reasons for Scheduling the Environmental Analysis of Gravina Island Timber Sale

Introduction

This appendix provides an explanation of the rationale for a specific timber harvest project and its importance to the multi-year timber program on the Tongass National Forest. To accomplish this, the following questions are answered:

- Why is timber from the Tongass National Forest being offered for sale?
- What steps must be completed to prepare a sale for offer?
- How does the Forest Service develop expectations about the market demand for timber?
- How does the Forest Service maintain an orderly and predictable timber sale program?
- How does the Forest Service decide where timber sale projects should be located?
- How does this project fit into the Tongass timber program?
- Why can't this project be located somewhere else?

Coordinated timber sale planning is essential for meeting the goals of the Tongass Land Management Plan and to provide an orderly flow of timber to local industry. To determine the volume of timber to offer each year, the Forest Service can look to current market conditions and the level of industry operations. However, the lengthy planning process, of which this document is a part, requires the Forest Service to rely on projections of future harvest levels to decide how many timber sale projects to begin each year. This document explains how the Forest Service uses information about future markets and past experience with the logistics of timber sale planning to determine the volume of timber that needs to be started through this process each year. This appendix is updated annually after the ten-year timber sale schedule is approved by the Forest Supervisor. The schedule for 2004 was approved by the Forest Supervisor on January 12, 2004.

Why is Timber from the Tongass National Forest Being Offered for Sale?

National Legislation

On a national level, the legislative record is very clear about the role of the timber program in the multiple-use mandate of the national forests. The Organic Act of 1897, 16 USC 473-481 (partially repealed in 1976) directed the agency to manage the forests in order to "improve and protect the forest ... [and] for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of the citizens of the United States" (emphasis added). The Multiple-Use Sustained Yield Act of 1960, 16 U.S.C. 528-531,

Appendix A

directs the Forest Service to administer federal lands for “outdoor recreation, range, timber, watershed, and wildlife and fish purposes.”

The National Forest Management Act (NFMA) of 1976 (16 U.S.C. 472a) states that “the Secretary of Agriculture...[may sell, at not less than appraised value, trees, portions of trees, or forest products located on National Forest System Lands].” Although the heart of the Act is land management planning, the Act also sets policy direction for timber management and public participation in Forest Service decision-making. Under NFMA, the Forest Service was directed to “limit the sale of timber from each national forest to a quantity equal to or less than a quantity which can be removed from such forest annually in perpetuity on a sustained-yield basis” (16 U.S.C. 1611).

NFMA directs the Forest Service to complete land management plans for all units of the National Forest System. Forest Plans are developed by an interdisciplinary team to provide for the coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness. These plans allocate certain parts of national forest for certain uses.

Alaska-Specific Legislation

Legislation unique to Alaska also directs the Forest Service to maintain a commercial timber program. The Alaska National Interest Lands Conservation Act (ANILCA; P.L. 96-487, 1980) and the Tongass Timber Reform Act (TTRA; P.L. 101-625, 1990) speak directly to the issue of Tongass timber supply. Section 705(a) of ANILCA directed the Forest Service to maintain a timber supply from the Tongass at a rate of 4.5 billion board feet per decade. To ensure that the timber target was met, Congress provided for a \$40 million annual earmark to fund pre-logging, cultural treatments and innovative logging systems.

Section 101 of TTRA repealed the timber supply mandate and fixed appropriations of ANILCA and replaced them with the following:

“Sec. 705. (a) Subject to appropriations, other applicable law, and the requirements of the National Forest Management Act of 1976 (P.L. 94-588); except as provided in subsection (d) of this section, the Secretary shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the annual market demand from such forest for each planning cycle”.

Timber from the Tongass National Forest is being offered as part of the multiple-use mission of the Forest Service as identified in public laws. Alaska-specific legislation and the Forest Plan direct the Forest Service to seek to provide timber to meet market demand subject to appropriations and balancing of forest uses.

Tongass National Forest Land and Resource Management Plan (Forest Plan, 1997, as amended)

The 1979 *Tongass Land Management Plan* (TLMP) was the first Forest Plan to be completed. This Forest Plan was scheduled for revision in the late 1980's. This revision incorporated new resource information and scientific studies and went through an intensive public involvement process. The Record of Decision for the revised Forest Plan (*Tongass Land and Resource Management Plan*) was issued in 1997. This decision was modified in 1999. Subsequently, Alaska Federal Court Judge James K. Singleton vacated the 1999 Forest Plan Record of Decision in a March 30, 2001 court decision. The 1997 Record of Decision is now in effect. Since then, amendments have been made to the 1997 Forest Plan, primarily to modify small Old-growth Habitat Reserves to meet Forest Plan, Appendix K criteria. These amendments have been accomplished with environmental analysis and are documented in decision documents. In certain areas, Land Use Designations have changed from development LUDs that allow timber harvest to Old-growth Habitat LUD or changed from the Old-growth Habitat LUD to development LUDs.

Alaska Federal Court Judge Singleton also directed the Forest Service to supplement the 1997 Forest Plan Final EIS to further evaluate the wilderness values of inventoried roadless areas and make any necessary changes to the prescribed Land Use Designations. The Record of Decision for this Supplemental Environmental Impact Statement was signed in February 2003.

The No-action Alternative was selected; no additional lands were recommended for Wilderness designation and no changes were made to the Land Use Designations from the 1997 Record of Decision, as amended.

With regard to timber production, the Record of Decision for the 1997 Plan states:

“The maximum amount of timber that could be harvested (Allowable Sale Quantity or ASQ) during the first decade of the 1997 Forest Plan implementation is an average of 267 MMBF per year. A timber volume level less than the ASQ is likely to be offered over the next few years, given current market conditions, the transition that both the timber industry and the Forest Service are experiencing, and the current amount of appeals and litigation.”

“The timber resource will be managed for production of sawtimber and other wood products from timberlands available for sustainable timber harvest, on an even-flow, sustained-yield basis and in an economically efficient manner. The Tongass National Forest will seek to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest timber and the market demand for the planning cycle.”

“The Tongass National Forest will continue to allow timber harvest while maintaining sustained yield and multiple-use goals. The forest-wide standards and guidelines for timber include general direction to “[e]nsure that silvicultural systems other than clearcutting are considered through an appropriate project level analysis process. However, uneven-aged management systems will be limited to areas where yarding equipment suited to selective logging can be used...”

“Forest-wide, considering all land allocations where timber harvest is permitted, it is estimated that 65 percent of harvesting will involve clearcutting, with the remaining 35 percent utilizing other methods.”

In the operation of the Tongass timber program, the Forest Service attempts to strike a balance among timber availability as documented in the Forest Plan, the market demand for timber in Southeast Alaska, the needs and desires of other forest users, and funding allocations made by Congress. The analysis for the Gravina Timber Sale project was completed to comply with the direction in the 1997 Tongass Land and Resource Management Plan (Forest Plan). The effects of the Forest Plan were analyzed as if the maximum timber harvesting allowed by the Forest Plan would occur over the next decade and into the future. This displayed the maximum environmental effects that could be reasonably foreseen. Since less timber has been harvested in the first 7 years of implementation (Table A-1) than what was projected to occur in the Forest Plan, the effects to other resources may be less than displayed in the Forest Plan EIS.

Roadless Area Conservation Rule

The Roadless Area Conservation Rule (Roadless Rule, January 2001) generally prohibited timber harvest and road construction in inventoried roadless areas on National Forest System lands. In July 2003, the US District Court for the District of Wyoming set aside the roadless rule and permanently enjoined its implementation. Under the current injunction, the roadless rule is not in effect. This project is consistent with current agency policy and procedures and has been designed to meet the management direction (goals and objectives, standards and guidelines) in the Forest Plan. An analysis to the effects to roadless areas within the project area has been included as part of the analysis for this project.

What Steps Must Be Completed to Prepare a Sale for Offer?

The timber sale program is complex. A number of projects are underway at any given point in time, each of which may be in a different stage of planning and preparation. A system of checkpoints, or “gates” (FSH 2409.18), helps the Forest Service track the accomplishments of each stage of a project from inception to contract termination.

Appendix A

Gate 1 - Completion of Position Statement

The Position Statement is a brief analysis of the project area with the intent of determining the feasibility of the potential timber sale. This is the first step in the timber sale planning process and it is usually completed from 7 to 10 years before a sale is offered. After the Position Statement is developed, the Forest Service decides whether to continue to the next phase of the project where an investment in time and money will be made.

Gate 2 – Sale Area Design, Environmental Documentation, and Decision

This phase of the project is commonly referred to as the “NEPA” phase and includes inventory, public scoping, analysis, draft disclosure of the effects of the project on the environment, public comment, final analysis and disclosure, decision, potential appeal, and potential litigation. Gate 2 activities are generally completed 2 to 6 years before a sale is offered. Legislation and policy changes, and appeals and litigation have recently delayed some projects to a much longer timeframe. The product of Gate 2, an environmental decision document, forms the starting point for the next phase.

Gate 3 – Plan Implementation and Field Layout

During this phase, the information and direction included in the decision document (Gate 2) is used to designate the actual project on the ground. Additional site-specific information is collected at this time. Gate 3 activities are typically completed 1 to 3 years before a sale is offered.

Gate 4 – Appraisal

The costs and value associated with the timber sale designed in Gate 3 are computed and packaged in a timber sale contract. The contract tells the prospective timber sale purchaser how the sale must be harvested to be in conformance to the project decision document. This occurs during the final year of the project development and culminates with the advertisement of the project for sale.

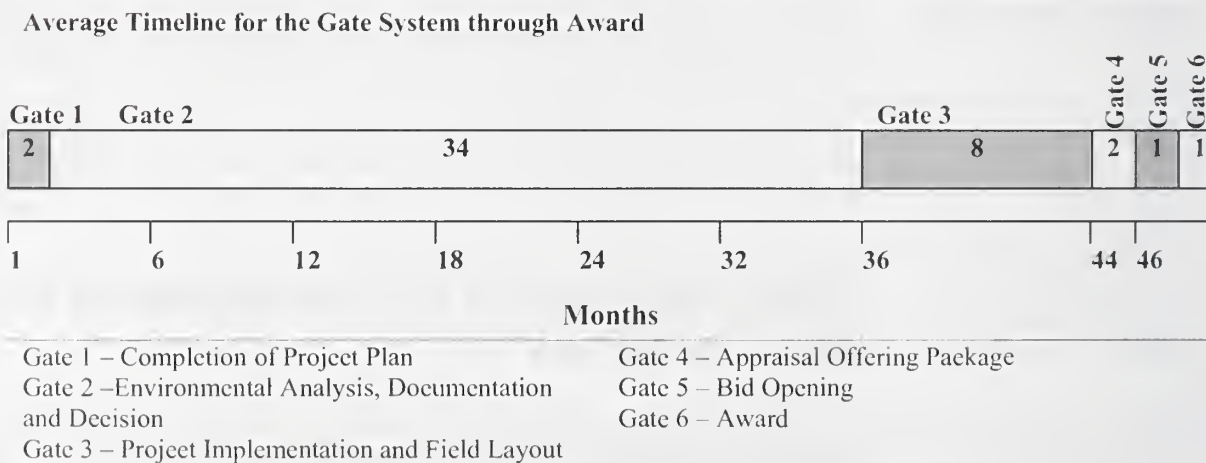
Gate 5 – Bid Opening

Gate 5 is completed with the opening of bids for the project. If a bid is submitted, contractual provisions govern when the award of the sale takes place, when the sale will be completed (contract length and operation season), and how timber removal is to occur.

Gate 6 - Award

Gate 6 is the formal designation of a contract between a bidder and the Forest Service.

Chart A-1
Average Timeline for the Gate System



* Source: Alaska Regional Office unpublished data, (Region 10 2002 Planning Workshop)

How does the Forest Service Develop Expectations about Future Timber Markets?

The Tongass National Forest makes two determinations on volume to be offered. The first is a determination on volume to be offered for the current year (annual market demand). The annual market demand is analogous to assessing industry performance in the short-term. In the short-run, a firm will make use of its existing equipment to maximize profits or minimize losses. The general approach is to consider the timber requirements of the region's sawmills at different levels of operation and under different assumptions about market conditions and technical processing capability. These assumptions provide a basis for estimating the volume of timber likely to be processed by the industry as a whole in any given year. Timber inventory requirements are acknowledged and estimated in a related calculation. The volume of timber likely to be purchased is equal to the volume needed to make up any inventory shortfall in addition to the volume likely to be harvested in the coming year. The document titled *Evaluating the Demand for Tongass Timber* (Morse 1998) forms the basis for how these estimates were developed. The document titled *Tongass National Forest Timber Sale Procedures* (Morse 2000a) documents actual estimates for the current year. This estimate is what the Tongass plans to offer for the current year of the Ten Year Timber Sale Schedule pending sufficient funding. Final procedures can be located in the document titled: *Responding to the Market Demand for Tongass Timber* (Morse 2000).

The offer planned could include a combination of new, previously offered, or previously offered and reconfigured timber sales. Both standing timber and salvage will be components of the program. Offerings will consist of those targeted for Small Business qualified firms as well as a portion of the volume being made available for the open market.

For planning purposes, the Forest Service needs to estimate what the long-term timber demand will be, given the cycles in the market. The Pacific Northwest Research Station was asked for professional assistance in assessing the long-term timber demand.

As the Tongass Land and Resource Management Plan was being revised in 1997, research economists at the Pacific Northwest Research Station (PNW) updated their earlier projections of Alaska timber products output and timber harvest by ownership. The most recent projections of timber harvest over the planning cycle account for several dramatic changes in the region's manufacturing capabilities, increased competition from a number of sources, and steady decline of North America's share of Japanese timber markets.

The Forest Service documents these projections and the means of implementation through the issuance of a Ten Year Timber Sale Schedule. Each year this plan is updated whereby the current year is dropped at the culmination of the fiscal year and a new year ten is added. The basis for this schedule is long-range timber market projections documented in the publication titled *Timber Products Output and Timber Harvest in Alaska: Projections for FY97-10* (Brooks and Haynes 1997). These projections of Alaska timber products output, the derived demand for raw material, and timber harvest by owner are developed from a trend-based analysis. These projections reflect the consequences of recent changes in the Alaska forest sector and long-term trends in markets for Alaska products. With the closure of the two Southeast Alaska pulp mills, demand for Alaska's National Forest System timber now depends on markets for sawn wood and the ability to export manufacturing residues and lower-grade logs. Three alternative projections are used to display a range of possible future demand (Table A-1). Areas of uncertainty include the prospect of continuing changes in markets, in conditions faced by competitors, and the speed and magnitude of investment in manufacturing in Alaska.

Demand projections are important for program planning. They provide guidance to the Forest Service to request budgets, to make decisions about workforce and facilities, and to indicate the need to begin new environmental analysis for future program offerings. They also provide a basis for expectations regarding future harvest, and thus provide an important source of

Life of the Forest Plan (Market Demand over the Planning Cycle)

information for establishing the schedule of probable future sale offerings. The weight given to the projections will vary depending on a number of factors, such as how recently they were done and how well they appear to have accounted for recent, site-specific events in the timber market.

Table A-1
Projected National Forest Harvest for Market Demand¹

Fiscal Year	Projected Harvest (MMBF)			Actual
	Low	Medium	High	
1998	77.3	86.0	112.2	119.8
1999	86.4	99.3	127.9	145.8
2000	95.5	115.9	142.7	146.8
2001	104.6	129.0	157.7	47.8 ²
2002	113.7	134.9	173.1	33.8
2003	122.8	140.8	188.9	50.8
2004	131.9	146.5	205.0	
2005	131.9	152.2	221.4	
2006	131.9	157.8	238.2	
2007	132.0	163.4	255.3	
Average	112.8	132.6	182.2	90.8

¹ Table 1 from *Responding to Market Demand for Tongass Timber*, Morse, April 2000, R10-MB-413. This schedule is based on the projections documented in *Timber Products Output and Timber Harvest in Alaska: Projections for FY97-10* (Brooks and Haynes 1997), and current volumes in the timber sale pipeline process. Prior to the beginning of each fiscal year the amount of volume to be scheduled in that fiscal year is once again analyzed to determine if the projection meets the anticipated need.

² Truncated logging season due to Judge James K. Singleton's Forest Plan Appeal Decision, March 30, 2001.

How does the Forest Service Maintain an Orderly and Predictable Timber Sale Program?

Pools of Timber (Pipeline Volume)

As discussed earlier, the Forest Service tracks the accomplishment of various stages of development of each timber sale with the Gate System process. From a timber sale program standpoint, it is also necessary to track and manage multiple projects through a "pipeline" of time as projects collectively move through the Gate System. Because of the timeframes needed to accomplish a given timber sale and the complexities inherent in timber sale project and program development, it is necessary to track various timber sale program volumes from Gate 1 through Gate 6. Gate 1 volume represents a large amount of program volume, but represents a relatively low investment from project to project. This relative investment level offers the timber program manager a higher degree of flexibility and thus, does not greatly influence the flow of volume through the pipeline. In addition, tracking how much volume that is in appeals or litigation may be necessary to determine possible effects on the flow of potential timber sales.

The goal of the Tongass National Forest is to provide an even flow of timber sale offerings on a sustained yield basis. In past years, this has been difficult to accomplish due to continual reductions in the suitable timberland base, reductions in the timber industry processing

capabilities, rapid market fluctuations, and Forest Plan modifications and litigation. To achieve an even flow of timber sale offerings, 'pools' of volume in various stages of the Gate System are maintained so volume offered can be balanced against current year demand and market cycle projections (*Declaration of Frederick L. Norbury, 1994*).

Today, upward trends in demand are resolved by moving outyear timber projects forward which may leave later years not capable of meeting the needs of the industry. In other instances, a number of new projects are started based on today's market but will not be available for a number of years. By the time the added projects are ready for offer, the market and demand for this volume may have changed. Three pools are being tracked to achieve an even flow of timber sale offerings:

- **Pool 1, Timber volume under analysis (Gate 2):** Timber volume under analysis contains sales being analyzed and undergoing public comment through the NEPA process. This process can often take from 1 to 5 years and ends with a NEPA decision. This pool includes any project with a formal Notice of Intent through those with a decision document issued. Volume in appeals and litigation is tracked as a subset of this pool as necessary (Table A-3).
- **Pool 2, Timber volume available for sale (Gate 3, Gate 4 and Gate 5):** Timber volume available for sale contains sales for which environmental analysis has been completed, and administrative appeals and litigation (if any) have been resolved. Enough volume in this pool is maintained to be able to schedule future sale offerings in an orderly manner of the size and configuration that best meets the need of the public. As a matter of policy, and sound business practice, the Forest Service announces probable future sale offerings with the Periodic Timber Sale Announcement. At Gate 4, sales have been fully prepared and appraised, and are available to managers to schedule for sale offerings. This allows potential purchasers an opportunity to do their own evaluations of these offerings in order to determine whether to bid, and if so, at what level.
- **Pool 3, Timber volume under contract (Gate 6):** Timber volume under contract contains sales that have been sold and a contract awarded to a purchaser, but which have not yet been fully harvested. Timber contracts typically, but not always, give the purchaser 3 years to harvest and remove the timber purchased. Contract length is based on the amount of timber in the sale, the current timber demand, and takes into account the accessibility of the area. The longer the contract period the more flexibility the operator has to remove the timber based on market fluctuations. Traditional Forest Service practice is to attempt to maintain about 2 to 3 years of unharvested timber volume under contract to timber purchasers. This volume of timber is the industry's dependable timber supply, which allows immediate flexibility in business decisions. This practice is not limited to the Alaska Region, but is particularly pertinent to Alaska because of the nature of the land base. The relative absence of roads, the island geography, the steep terrain, and the consequent isolation of much of the timber land means that timber purchasers need longer-than-average lead times to plan operations, stage equipment, set up camps, and construct roads prior to beginning harvest.

A combination of actual harvest and projected demand is used to estimate the volume needed to maintain an even flow timber sale program. As purchasers harvest timber, they deplete the volume under contract. The Forest Service tracks the amount harvested. Timber harvest is then planned and offered as sales that give the industry the opportunity to replace this volume and build or maintain their working inventory. Although there will be variation for practical reasons from year to year, in the long-run over both the high points and low points of the market cycle, the volume harvested will equal the timber volume sold.

The Forest Service, based on historical patterns, determines the amount of pipeline volume needing to be maintained in each of the pools.

Appendix A

- Pool 1, Timber Volume under Analysis, should be maintained at approximately 4.5 times the amount of anticipated harvest.
- Pool 2, Timber Volume Available for Sale, should be maintained at approximately 1.3 times the amount of anticipated harvest.
- Pool 3, Volume under Contract, should be maintained at approximately 3 times the amount of anticipated harvest to allow for continuous timber volume to be available.

The objective of the pools concept is to maintain sufficient volume in preparation and under contract to be able to respond to yearly fluctuations in a timely manner. The amount of volume estimated to be harvested for the year sets the basis for what will be maintained in Pools 1-3 (Gates 2 through 6). Table A-2 displays the volume levels that are currently in each pool.

Table A-2
Crosswalk between Gate Tracking System (FSH 2409.18) and the concept of Pools of Timber (as of 1/12/04)

Pipeline Pool Volume		FY 03	Planned During FY 04	Planned End of FY 04
Pool 1 Volume Under Analysis ¹ (Gate 2) (MMBF) (4.5 times expected harvest)		370-500 ²	150 ³	450-520 ⁴
Pool 2 Volume Available for Sale ⁵ (Gate 3, Gate 4 and Gate 5) (MMBF) (1.3 times expected harvest)	NEPA Cleared	360 ⁶	70-130 ⁷	254-314
	Offered	118	176 ⁸	--
	Sold	36	--	--
Pool 3 Volume Under Contract ⁹ (Gate 6) (MMBF) (3 times expected harvest)	Volume under Contract	193 ¹⁰	176 ¹¹	223-459 ¹²
	Volume Harvested	51	132 ¹³	

¹Gate 2 (see above): projects for which an environmental analysis has been started

²Estimated Volume range from all alternatives for all NEPA projects

³Estimated Volume for environmental analysis projects to be started in FY 04

⁴NEPA project volume minus the volume cleared with NEPA decisions planned for FY 04

⁵Gate 3, field preparation work; Gate 4, timber sale contract package preparation; Gate 5, timber sale bid opening.

⁶Estimated Volume cleared from previous NEPA decisions

⁷Possible Volume from NEPA decisions in FY 04 (if action alternative is selected)

⁸From Ten-year Timber Sale Schedule. Average ten-year schedule demand using Tongass National Forest Timber Sale Procedures, (Morse 2000a), updated for FY 2004, is 153 MMBF.

⁹Gate 6: Timber sale award and contract execution, based on the Timber Sale Statement of Accounts.

¹⁰Volume under contract as of September 30, 2003. Contracts eligible for mutual cancellation under Public Law 108-108 could decrease this amount by 138 MMBF.

¹¹Volume planned for sale in FY 04. Tongass National Forest Ten Year Timber Sale Schedule approved by Forrest Cole, Forest Supervisor, Tongass National Forest, January 12, 2004

¹²Assumes that all sales sell. If all contracts eligible for mutual cancellation occur, this volume would be 223 MMBF.

¹³Projected harvest from FY04 demand calculation. Projected harvest from the PNW Research Station using the LOW market scenario was 123 MMBF.

Table A-3
Timber Volume in Appeals and/or Litigation (as of 07/16/04)

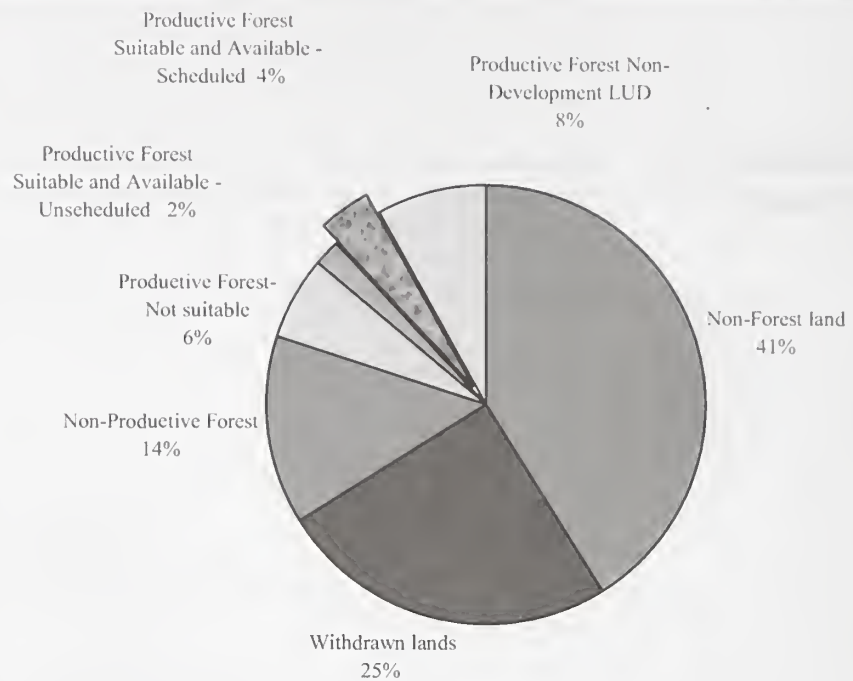
Timber volume remanded on appeals *	35 Million Board Feet
Timber volume enjoined in litigation	202 Million Board Feet

*Does not include that volume in decisions currently in the appeal period or undergoing an appeal.

Timber Resource Land Suitability

The chart below depicts the classification of all the lands within the Tongass National Forest. Four percent of the Tongass land base, the productive suitable and available forest land, provides the land base for the Allowable Sale Quantity of 267 MMBF per year. The remainder of the land, approximately 96 percent, does not allow, is not scheduled, or will not support timber harvest activities (based on Forest Plan, Appendix A).

Chart A-2
1997 Forest Plan Timber Resource Suitability Analysis



Non-Forest land – Land that has never supported forests, e.g. muskeg, rock, ice, etc.

Withdrawn Lands – Lands designated by Congress, the Secretary of Agriculture, or Chief for purposes that preclude timber harvest, e.g. Wilderness Areas.

Non-productive Forest – Forest land not capable of producing commercial wood on a sustained yield basis

Productive, Non-development LUD – Productive forest lands where timber production is not allowed due to Forest Plan land use designation e.g. Semi-Remote Recreation, Old-growth Habitat, etc.

Productive Forest - Not suitable – Forest land unsuitable for timber due to physical attributes (steep slopes) and/or inadequate information to insure restocking trees (soils)

Productive Forest, Suitable and Available - Scheduled – Forest land that meets all the criteria for timber production suitability and is available and is scheduled by the Forest Plan over the rotation

Productive Forest Suitable and Available - Unscheduled – Forest land that meets all the criteria for timber production suitability and is available but not scheduled for harvest.

Allowable Sale Quantity (ASQ)

The 1997 Forest Plan Record of Decision established an Allowable Sale Quantity (ASQ) for timber at 2.67 billion board feet per decade, which equates to an annual average of 267 million board feet (MMBF) per year. The ASQ serves as an upper limit on the amount of timber that may be offered for sale each year as part of the regularly scheduled timber sale program. It consists of two separate Non-Interchangeable Components (NICs) called NIC I and NIC II. The NIC I component includes lands that can be harvested with normal logging systems including helicopter logging with less than ¾ mile yarding distance. The NIC II component includes land that has high logging costs due to isolation or special equipment requirements. Most of these NIC II lands are presently considered economically and technically marginal.

There are two purposes of partitioning the ASQ into two components:

- to maintain the economic sustainability of the timber resource by preventing the over-harvest of the best operable ground and
- to identify that portion of the timber supply that is at risk of attainment because of marginal economic conditions.

District-Level Planning

The Tongass National Forest is divided into ten ranger districts. For planning and scheduling purposes, the allowable sale quantity is distributed by ranger district. Each district has been allocated a portion of the timber harvest program based on the FORPLAN computer run and availability of suitable and available acres, to implement the Forest Plan, and Section 101 of the Tongass Timber Reform Act (1990). The average distribution of the Forest Plan ASQ harvest among the ranger districts is displayed in Table A-4 (all volumes are identified as sawlog plus utility).

Table A-4
Distribution of Forest Plan ASQ for the Tongass National Forest Ranger Districts

Ranger District	Non-Interchangeable Components	
	NIC I	NIC II
Ketchikan/Misty Fiords	32	7
Thorne Bay	42	9
Craig	33	7
Wrangell	28	6
Petersburg	50	9
Sitka	17	4
Hoonah	7	2
Juneau	7	2
Yakutat	4	1
Admiralty National Monument	0	0
NIC Totals	220	47
ASQ Total (MMBF)	267	

The Forest Supervisor for the Tongass National Forest has discrete responsibilities for the overall management of the Forest's timber sale program. Included within these responsibilities is making the determination on the amount of timber volume to be made available to industry, as described above. Once a determination is made for the current year (annual demand) offer level, the information is presented to Congress via the Regional Forester and Chief of the Forest Service. Whether or not funding is appropriated to attain the program is the responsibility of the Congress and the President of the United States.

While the debate on funding takes place, the Tongass Forest Supervisor directs the District Rangers to formulate a timber sale plan that attains the prescribed offer level for the current year as well as developing outyear timber programs based on projected market demand for the planning cycle. District Rangers are also directed to prioritize efforts in areas that are economical as possible and are not subject to pending legislation and litigation. The Ranger's role is to recommend to the Forest Supervisor timber harvest projects that meet Forest Plan goals and objectives. Districts work on various projects simultaneously, resulting in continual movement of projects through the stages of the timber program pipeline. Their schedule allows the necessary time to complete preliminary analysis, resource inventories, environmental documentation, field layout preparations and permit acquisition, appraisal of timber resource

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values, advertisement of sale characteristics for potential bidders, bid opening, and physical award of the timber sale. Once all of the Rangers' recommendations are made and compiled into a consolidated schedule, the Forest Supervisor is responsible for the review and approval of the final schedule.

The implementation of the sales on the schedule depends on Congressional appropriations. In the event insufficient funds or resolution to pending litigation or legislation delay planned sales, timber sale projects are selected and implemented on a priority basis. Generally, the higher priority projects include sales where investments such as road networks, camps or log transfer facilities have already been established or where land management status is not under dispute. The location and distribution of sales across the Tongass is also taken into account to distribute the impacts to the environment and users of the area and to provide sales in proximity to all processing facilities. Those sales that are not implemented or only partially implemented are moved to an outyear. The sale schedule becomes very dynamic in nature due to the number of influences on each district. A review of the schedule is done annually by the Forest Supervisor in consultation with the District Rangers. Changes are made as needed through the course of the year. These changes or additions may be either additions of projects or sales. (The Tongass Timber Sale Plan is located on the Tongass National Forest Website, www.fs.fed.us/r10/tongass/).

The National Forest Management Act requires the Forest Service to develop timber sale schedules that encompass the life of the Forest Plan. The Tongass National Forest Planning process culminated in issuance of the *Record of Decision* for the *Tongass Land and Resource Management Plan*. The timber sale schedule is included in Appendix L of the Forest Plan. In response to this Plan, the Tongass prepares a ten year timber sale schedule for each fiscal year. The Ten Year Timber Sale Schedule for Fiscal Year 2004-2013 offer levels are based to the extent possible on the annual market demand. This demand is calculated annually before the schedule is updated. Demand may fluctuate from year to year but recent years have shown little change in the demand. Offerings may vary from year to year but averages out to the low market scenario range as determined by the calculated annual demand. Planning delays attributable to the resolution of the Roadless Rule and court ordered injunctions has affected this offer level in recent years. Table A-5 displays the timber sales planned for Fiscal Year 2004 and is an example of the information available on the schedule. These sales may change because of appeals and litigation, economics or policy changes.

The Ten Year Timber Sale Schedule provides the following information among other items:

NEPA Project Name: Environmental document project name. This name may or may not differ from the timber sale project name depending on how many sales originate from the original NEPA document.

Decision Date: The date of the decision document, whether planned or actual. "(Date)*" denotes the decision for the project is planned within the Fiscal Year but there was no decision when the schedule was compiled. An "X" denotes that the project already had a decision made in previous years.

RD: Ranger district where project is located

NEPA decision volume (MMBF): The amount of volume in million board foot approved by the NEPA decision document. Timber sale project volume (sawlog plus utility).

Sale Name: This is the timber sale project name. Volume from a NEPA document may be divided into several sales or volumes can be combined from several NEPA documents.

Gate 3 (Layout): The fiscal year sale is to be laid out. If blank, the sale has previously been delineated on the ground and cruised. Number indicates potential or actual volume depending if cruise and appraisal is complete.

Gate 5 (Offer): The fiscal year sale is to be offered for sale. Number indicates potential or actual volume depending if cruise and appraisal is complete.

Table A-5
Tongass Ten Year Timber Sale Schedule -Fiscal Year 2004, January 12, 2004

NEPA Project Name	NEPA Decision Date Gate 2	Ranger District (RD)	NEPA Decision (MMBF)	Sale Name	Gate 3	Gate 5
Licking Ck EIS, Sea Level EIS, Mop Point EA, Brand X EA	Various	Ketchikan RD	73.0	Painted Peak	40.0	40.0
Sea Level EIS	X	Ketchikan RD	51.0	Orion North	8.0	8.0
Boundary EA	Jan-04	Ketchikan RD	3.0	Boundary	3.0	3.0
Cholmondeley EIS	Apr-03	Craig RD	35.0	Sunny	7.0	7.0
Cholmondeley EIS	Apr-03	Craig RD	35.0	Cher	5.0	5.0
Thorne Bay Small Sale EAs	Various	Thorne Bay RD	11.2	Various	2.7	3.0
Roadside EA	X	Thorne Bay RD	15.0	Small Sales	1.9	2.0
Lab Bay EIS	X	Thorne Bay RD	42.2	Thorne Island	0.0	1.8
Luck Lake EIS	X	Thorne Bay RD	22.0	Luck Lake ReOffer	0.0	13.9
Luck Lake EIS	X	Thorne Bay RD	22.0	Lucky Logger	0.0	0.5
Control Lake EIS	X	Thorne Bay RD	57.9	Kogish/Shiniku	2.0	10.0
Heceta Second Growth EA	(Apr-04)*	Thorne Bay RD	5.5	Heceta CT Sale	0.1	5.5
		Juneau RD	0.0	No Sales Planned		
Finger Mountain EIS	Jun-03	Sitka RD	21.4	Inbetween		10.1
Finger Mountain EIS	Jun-03	Sitka RD	21.4	Fogg Creek	10.3	10.3
8-Fathom	X	Hoonah RD	15.5	Midway/Hotsprings		15.8
Hoonah RD Small Sales EA	(Jul-04)*	Hoonah RD	0.4	Small Sales	0.4	0.4
Salvage CE	(May-04)*	Yakatat RD	0.2	Small Sales	0.1	0.1
South Lindenberg EIS	X	Petersburg RD	40.0	South Lindy Mt. Re-sale Two	13.5	13.5
Woodpecker EIS	March-02	Petersburg RD	4.5	Cove	0.5	0.5
Threemile EIS	(April-04)*	Petersburg RD	20.0	Threemile	20.0	20.0
Overlook EA NEPA	(Jun-04)*	Petersburg RD	7.0	Overlook	2.0	2.0
Doughnut EA	X	Wrangell RD	8.0	Doughnut		3.4

How Does the Forest Service Decide Where Timber Harvest Projects Should be Located?

The location of timber sale projects is based on the land allocation directed in the Forest Plan decision. The Forest Plan allows timber sales in areas identified as Timber Production, Modified Landscape, and Scenic Viewshed Land Use Designations.

The District Ranger is responsible for identifying and recommending the project areas for the Ten Year Timber Sale Schedule. The considerations the Ranger makes on each project include but are not limited to the following:

- The project area contains a sufficient number of acres allocated to development Land Use Designations to make timber harvest in the area appropriate under the Forest Plan. There is an adequate amount of suitable and available land for timber harvest opportunities. Available information indicates harvest of the amount of timber volume being considered for this project can occur consistent with the Forest Plan standards and guidelines, other resource protection requirements and human needs such as subsistence.
- The project and proposed timber harvest volume contribute to achieving the goals and objectives of implementing the Forest Plan.
- To the extent feasible, the potential investment in infrastructure (roads, bridges, log transfer facilities, camps, rock pits, etc.) necessary for sustainable timber harvest offerings is achievable with the project and estimated value of timber. Where infrastructure already exists, this project will enable any maintenance and upgrade of the facilities necessary for removal of timber volume.
- Based on current year and anticipated outyear timber volume demand, volume currently under contract; anticipated Congressional allocations, and the availability of resources to fully prepare and offer this project for sale, this project is consistent with and meets all laws and regulations governing the removal of timber from National Forest System lands, Forest Service policies as described in the manuals and handbooks, and the 1997 Tongass Land and Resource Management Plan FEIS and ROD.

How Does This Project Fit into the Tongass Timber Program?

The Gravina Timber Sale project is currently in Gate 2, "Volume Under Analysis." The amount of volume for the action alternatives is approximately 14.2 MMBF to 47.2 MMBF that could contribute to the Tongass Timber Sale Program. A no-action alternative is also included. If an action alternative is selected in the decision for the Gravina Timber Sale project, this volume will be added to the volume available for sale. As described in above, the volume of timber needed to maintain Pool 1 is 4.5 times the expected harvest for that year. Currently, forest-wide, Pool 1 contains from 370 MMBF to 500 MMBF inclusive of this project. Therefore, the Gravina Timber Sale project is consistent with program planning objectives and necessary to meet the goal of providing an orderly flow of timber from the Tongass on a sustained yield basis. Given the included information, it is reasonable to be conducting the environmental analysis for this project at this time. The Gravina Timber Sale project is tentatively proposed for offer beginning in Fiscal Year 2006 (Tongass National Forest Ten Year Timber Sale Plan, Forrest Cole, Forest Supervisor, Tongass National Forest, January 12, 2004).

Why Can't This Project Occur Somewhere Else?

The suitable and available land base on the Tongass National Forest is capable of supporting an Allowable Sale Quantity of 267 MMBF annually, 220 MMBF of which is considered economical (i.e. the NIC I component) under the usual markets. Based on the analysis for the Forest Plan, all suitable timberlands where timber harvest is allowed will eventually be scheduled for harvest to meet the current and projected demand for raw material in Southeast Alaska. The relocation of this project to another area is inefficient and potentially contrary to the standards and guidelines of the Forest Plan. This decision is based on the cumulative impact on other resources from past harvest activities, the location of timber sales under contract, and the eventual use of all suitable lands for timber sale projects.

The reasons this area is being considered include:

- Areas with available timber will be necessary to consider for harvest in order to seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle, pursuant to Section 101 of the Tongass Timber Reform Act (TTRA).
- The potential effects on subsistence resources are projected to differ little based on the sequence these areas are harvested. Harvesting other areas with available timber on the Tongass National Forest is expected to have similar potential effects on resources, including those used for subsistence, because of widespread distribution of subsistence use and other factors. Harvest within other areas is foreseeable under the Forest Plan.
- Providing substantially less timber volume than required to meet Forest Plan and TTRA Section 101 timber supply and employment objectives in order to avoid harvest in the project area is not necessary or reasonable.
- It is reasonable to schedule harvest in the project area rather than in other areas at the present time. In addition to the reasons listed above, scheduling is due to accessibility of the project area to operators, shippers, and manufacturers; opportunity for cooperation with other landowners (agencies); avoidance of cumulative impacts of premature re-entry in other areas harvested; and the ability to complete the National Environmental Policy Act (NEPA) and make volume of timber available to meet the needs of dependent industries. Other areas that are reasonable to consider for harvest in the near future are the subjects of other project EISs that are currently ongoing or scheduled to begin soon.

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Appendix B

Response to Comments

Grading 4

Grading 4

Appendix B

Response to Comments

Introduction

Appendix B includes all written comments received for the Gravina Island Draft Environmental Impact Statement (EIS) and the U.S. Forest Service responses to them.

Analysis and Incorporation of Public Comment

One hundred and twenty-one agencies, organizations, and individuals submitted written comments on the Gravina Island Draft EIS. We also received over 4,000 form letter comments by e-mail, most of which came from the following three websites: Alaska Rainforest Campaign, Sierra Club, and Defenders of Wildlife. Many of the e-mail comments requested a ban to all logging on National Forest System land, voiced opposition to logging and roadbuilding in any form, in any place, or opposed logging in Alaska, particularly in the Tongass National Forest. Almost all the e-mails stated that the Gravina Island Timber Sale is in violation of the roadless rule.

Individuals also offered comments by phone, fax, and voicemail.

To facilitate this analysis, each letter was annotated according to the concern(s) it addressed. These concerns were then categorized into similar Comment Types (CT) and assigned a Comment Type number. The individual annotated letters have been scanned and appear in this Appendix. The Interdisciplinary Team (IDT) thoroughly and objectively read, analyzed and responded to every substantive issue or concern. The IDT's consolidated response to each Comment Type appears following the letters. Issues that are not specifically addressed here have been addressed in the Final EIS and ROD.

E-mail Letters Received from Individuals, Organizations, and Agencies

Name	Organization	City	State	Page	Responsive Comment Types (CT#)
David Martin	Individual	Ward Cove	AK	B-4	3, 8, 19
Julie Powers	Individual	Ketchikan	AK	B-5	7
Stormy CSII	Individual	Metlakatla	AK	B-25 - 26	10
website form letter	Alaska Rainforest Campaign			B-27	1, 2, 3, 4, 5, 6
website form letter	Sierra Club			B-28	1, 2, 3, 4, 5, 6
website form letter	Defenders of Wildlife			B-29	2, 5, 7, 8

Comments Received by Phone and Voicemail

Name	City	State	Comment	Responsive Comment Types (CT#)
Rich Hudson	Metlakatla	AK	Opposed to logging on Gravina	8
Fred Monrean	Ketchikan	AK	Supports Gravina project, especially accessing the project area from Tongass Narrows. Supports roaded access for local recreation, timber harvest for jobs, and avoiding an LTF in Bostwick.	3, 6, 7, 16

Appendix B

Letters Received from Individuals, Organizations, and Agencies

The following list includes all individuals, organizations, and agencies that the U.S. Forest Service received substantive comments from during the 158-day extended comment period following the publication of the Gravina Island Draft Environmental Impact Statement.

Name	Organization	City	State	Pages	Responsive Comment Types (CT#)
David Wieler	Individual	Ward Cove	AK	B-6	6
Cindy Wagner	Individual	Metlakatla	AK	B-7	1, 3, 5, 7, 17, 19, 23
	Saanyakwaan Teikweidi	Ketchikan	AK	B-8 - 9	3, 4, 23
Chip Porter/Evon Zerbetz	Individual	Ketchikan	AK	B-10	6, 7, 23
see list of senders at letter	Alaska Forest Association	Ketchikan	AK	B-11	12
see list of senders at letter	"No Action" form letter	Ketchikan	AK	B-12	3, 12
Bruce Dixon	Individual	Ketchikan	AK	B-13	8
Victoria McDonald	Individual	Ketchikan	AK	B-14	4, 15
Betsy Booth	Individual	Ketchikan	AK	B-15	3
Priscilla Schulte	Individual	Ketchikan	AK	B-16	3
Dolly Garza	Individual	Ketchikan	AK	B-17	3
Victor Edenso, Jr.	Individual	Ketchikan	AK	B-18	15
Richard Harris	Sealaska Corporation	Ketchikan	AK	B-19 - 21	7, 12, 19, 23, 25
Bernard Guthrie	Individual	Metlakatla	AK	B-22	5, 15
Lindarae Shearer	Individual	Metlakatla	AK	B-23 - 24	3, 4, 7, 15
Lorraine Marshall	AK State Dept. Govt. Coord.	Juneau	AK	B-30 - 32	13, S
Tom Paul	AK Dept. of Fish & Game	Douglas	AK	B-33 - 35	9, 12, 13, 18
Owen Graham	Alaska Forest Association	Ketchikan	AK	B-36 - 40	5, 6, 7, 9, 11, 12, 18, 19, 24, 25, S
Michelle Nordhoff	AK Center for Environment	Anchorage	AK	B-41 - 43	1, 2, 14, 15, 24
John Schoen	Audubon Society	Anchorage	AK	B-44 - 45	1, 5, 8
Bill Rotecki	Individual	Ketchikan	AK	B-46 - 47	3, 6, 7, 9, 12, 18, 19, 24
Diek Coose	C.A.R.E.	Ketchikan	AK	B-48 - 50	5, 6, 7, 12, 15
Richard Coose	Individual	Ketchikan	AK	B-51 - 52	5, 6, 7, 12, 15, 22
Pamela Bergmann	DOI - USFWS	Anchorage	AK	B-53 - 61	1, 2, 5, 12, 15, 16, 17, 19, 22
Erie Muench	Individual	Ketchikan	AK	B-62	6, 7, 12, 20, 23
Bryan Bird	Forest Conservation Council	Santa Fe	NM	B-63 - 68	1, 7, 10, 11, 14, 19, 21, 24
Joshua Martin	Friends of the Tongass	Bloomington	IN	B-69 - 72	1, 3, 6, 12, 14, 15, 22
Mike Harpold	Individual	Ketchikan	AK	B-73	6, 7
Merle Nancy Hawkins	Individual	Ketchikan	AK	B-74 - 76	3, 12, 15
Jill Jacob	Individual	Ketchikan	AK	B-77	3, 5, 7, 12
Cliff Skillings	Ktn. Chamber of Commerce	Ketchikan	AK	B-78 - 80	5, 6, 7, 15
Georgianna Zimmerle	Ketchikan Gateway Borough	Ketchikan	AK	B-81 - 84	5, 6, 7, 9, 11, 12, 18, 19, 24, 25, S
John Hill	Ktn. GB Coastal District	Ketchikan	AK	B-85 - 86	3, 6, 7, 23
Marly Edenso	Ketchikan Indian Corporation	Ketchikan	AK	B-87 - 88	9, 12, 15
Maisie Jones	Individual	Haines	AK	B-89	8
Elmer Makua	Tongass Tribe	Ketchikan	AK	B-90 - 94	2, 4, 5, 11, 12, 14, 15, 16, 22
Marvin Charles Sr.	Individual	Ketchikan	AK	B-95 - 97	7, 9, 15, 18, 20

Name	Organization	City	State	Pages	Responsive Comment Types (CT#)
Mike Sallee	Individual	Ketchikan	AK	B-98 - 99	9, 10, 18, 22
Susan Walsh	Individual	Ketchikan	AK	B-100 - 101	1, 3, 6, 7, 8, 9, 14, 23
Susan Walsh	Individual	Ketchikan	AK	B-102 - 103	3, 4, 5, 6, 7, 12, 14, 22
Steve Seley	Pacific Log & Lumber	Ketchikan	AK	B-104	6, 7, 12
Page Else	Sitka Conservation Society	Sitka	AK	B-105 - 115	1, 2, 3, 5, 6, 9, 11, 12, 13, 14, 16, 17, 18, 19, 21, 23, 24
Aurah Landau	SE AK Conservation Council	Juneau	AK	B-116 - 134	1, 2, 3, 5, 7, 9, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24
Mark Rorick	Sierra Club Juneau Chapter	Juneau	AK	B-135 - 150	1, 2, 5, 7, 11, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24
Errol Champion	Individual	Juneau	AK	B-151	7
Elmer Makua	Tongass Conservation Soc.	Ketchikan	AK	B-152	1, 3, 14
Douglas Campbell	Alaska Mental Health Trust	Anchorage	AK	B-153	7, 24
Judith Lee	US Env. Protection Agency	Seattle	AK	B-154 - 164	1, 2, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16, 19, 21, 24, S
Eleanor Huffines	Wilderness Society	Anchorage	AK	B-165 - 167	1, 2, 4, 5, 6, 12
Douglas Grann	Wildlife Forever	Eden Prairie	MN	B-168	1, 5, 6, 7, 12
George Winter	Individual	Ketchikan	AK	B-169 - 170	3, 7
Brian McNitt	Alaska Rainforest Campaign	Sitka	AK	B-171	1, 2, 5, 7, 9, 16

Comment Type:

Responses to these Comment Types appear on pages B-172 to B-220, as indicated below.

Comment Type 1: Violates Roadless Rule, p. B-172

Comment Type 2: Pre-SEIS/Harms Wilderness/Old-growth Values, p. B-173

Comment Type 3: Impacts on Traditional Use/Impacts to Bostwick Inlet, p. B-174

Comment Type 4: Impacts on Historic and Cultural Sites, p. B-175

Comment Type 5: Impacts on Fish and Wildlife Habitat, p. B-176 to B-178

Comment Type 6: Impacts on Recreation, Tourism and Visuals, p. B-179 to B-180

Comment Type 7: Sustainability, Economics and Market Demand, p. B-181 to B-186

Comment Type 8: Don't Harvest on Gravina Island, p. B-187

Comment Type 9: Silvicultural Prescriptions, p. B-188 to B-189

Comment Type 10: Beyond the Scope of this Analysis, p. B-190

Comment Type 11: Old-growth Analysis and Biodiversity, p. B-191 to B-192

Comment Type 12: Supports a Specific Alternative, p. B-193

Comment Type 13: Stand Structure and Volume Class, p. B-194

Comment Type 14: Cumulative Effects, p. B-195 to B-196

Comment Type 15: Subsistence, p. B-197 to B-198

Comment Type 16: Effects of Roads/ Road Closures and Enforcements, p. B-199 to B-200

Comment Type 17: Impacts on Wolves, p. B-201

Comment Type 18: Deer Model, p. B-202

Comment Type 19: Marine Environment, p. B-203 to B-204

Comment Type 20: Hunting, p. B-205

Comment Type 21: Range of Alternatives, p. B-206 to B-207

Comment Type 22: Procedural Violations, p. B-208 to B-209

Comment Type 23: Cooperate with Other Landowners, p. B-210 to B-211

Comment Type 24: Impacts on Watershed, Soils, Slopes, Karst, p. B-212 to B-214

Comment Type 25: Roading Options for Helicopter Units, p. B-215

Comment Type S: Unit-specific Comments, p. B-216 to B-220

Appendix B

e-mail

April 25, 2001

To: Forest Supervisor

Re: Proposed Gravina Island Timber Sale

Having missed the public meeting on April 23, I would like to offer the following comments for inclusion in the public record.

It was just a few years ago that I was of the mindset that it didn't matter where trees were logged, just so they made it to the ground, to the water, and to the mill.

Now, a bit distanced from those last days, I look at things differently. At that time, the trees weren't cut in my back yard, but they did come from somewhere. Places with and without names, with and without meaning, but they did come from somewhere.

Given all of the changes, limitations, and closures, we have come to the point that once again we are looking at cutting our own back yard. Slide Ridge is bad enough. But nothing can be done about that one now. Gravina Island is not yet (I hope) a done issue.

CT-8

Hopefully we do not have to sacrifice this area for short term gain. With potential plans being worked for north end development, a possible bridge and airport expansion, the island is going to get hit hard enough as it is.

CT-8

This cutting area is right next door. And right in an area used by people as they have for a long time.

Gravina Island has areas used by our friends, neighbors and families for a multitude of uses. Traditional subsistence uses and recreation users in this area need to rate a far higher priority than timber harvest. A good friend of mine reminded me that not everyone who hunts on Gravina, or picnic/fishes at Bostwick, or gathers subsistence has a big enough boat or an airplane to go someplace else safely. This is one of the few nearby places where small boats and skiffs can more easily get to.

CT-3

I don't know, or pretend to know the "scientific" degradation that comes when the bark that comes off during handling at a log transfer facility settles on the bottom like it did at Ward Cove, maybe it alters what is naturally there? Like the seaweed that is gathered, or other elements essential to marine life?

CT-19

I just think this is a bad idea.

I urge that the alternative of "No Action" be adopted for Gravina Island.

Sincerely,

David Martin

Box 1026

Ward Cove, Alaska 99928

c-mail

To: mjjones@fs.fed.us

Subject: Gravina Island Logging

04/25/01

I would like it noted on the record that I support opening up part of Gravina Island to logging. People will still be able to hunt on Gravina and Revillagigedo Island. We need jobs in Ketchikan. Please let us have some balance of the needs of the people to work and support a family in Ketchikan. Please open logging operations on Gravina.

CT-7

Thank you,

Julie Powers

Appendix B

JERRY INGERSOLL
DISTRICT RANGER
KRD
3031 TONGASS
KETCHIKAN, AK 99901

2-11-01

RE GRAVINA DEIS

MS MARTHALLER,

A nice document. The pictures in the back were helpful. It is my opinion that clearcut logging detracts from the appearance of wilderness as seen by cruiseline visitors. Clearcut logging should be avoided in the proximity of Ketchikan in order that the setting for the gem of Ketchikan be not damaged.

CT-6

The alternatives listed did not include one which might be the most important for preserving cruiseline and ferry boat tourism:

- no roads
- helicopter logging only
- selective logging only, no clear cuts.

Respectfully,



David Wieler
Box 611
Ward Cove, AK 99928

McLesterDawn

FAX NO. :

Feb. 12 2001 03:56PM P1

February 10, 2001
 POBox 369
 Metlakatla, AK 99926

Mayor and Council
 Annette Islands Reserve
 Metlakatla, AK 99926

RE: Gravina Island

Upon reading through this massive report, there is hardly anything on Metlakatla and where our community stands with this controversial project. From what I have seen of the maps and plans, all roads for a log storage dump lead to Bostwick. CT-3

In the first place, Bostwick is State-designated for subsistence only. According to the plans and options, this is not a concern to the Forest Service. They are looking for other areas that can be declared "subsistence only" to replace Bostwick. CT-3

Metlakatla residents use Bostwick a lot, cockles, crabs and hunting are just a few items our citizens gather for subsistence. Perhaps we should remember how we used to be able to get crab in Hemlock. Logging and log storage in this area has been over with for a long time now, but there is still no crab in Hemlock.

Proposal #1 is for no action at all. The Roadless Issue is in effect, all sales as well as discussion or action is illegal, yet the Gravina Island Project is continuing on as if nothing is in effect. CT-1

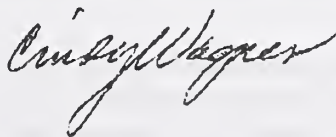
Proposals #2 and #4 are nearly the same, board feet being the only real difference. Proposal #2 shows the road to Bostwick and Proposal #4 doesn't show the road, but in reality, it will be there, as the long dump is still cited for Bostwick. CT-19

Proposal #3 proposes road through a large area designated by the Federal Government as "Mental Health" land, can't be bought or sold but could be exchanged. This is not feasible much less possible. CT-23

Proposal #5 is helicopter logging. We all know this is too expensive. Too much wood would be left because of the distance to the log dump, which would still be Bostwick. CT-7

Salmon streams would be crossed in all proposals except #1 and #5. Several groups are concerned with a known wolf den that would be affected. CT-5/17

Perhaps a formal Resolution stating Metlakatla's stand on this issue, hopefully in support of Proposal #1, therefore saving Bostwick, would be in order. There is a deadline of March 19, 2001 for comments. Perhaps this would be a good opportunity to comment on the fact that "to comment on a project that is clearly prohibited and not adhering to the Roadless Issue is illegal. Therefore, to comment on as well as ask for comments on illegal process is useless." CT-1



Cindy Wagner
 POBox 369
 Metlakatla, AK 99926

Appendix B

Saanyakwaan Teikweidi Hootz Hit #2

#C/O Cape Fox Corporation
Attention: Irene Shields-Dundas
Box 8558
Ketchikan, Alaska 99901

April 25, 2001

USDA Forest Service
Ketchikan-Misty Ranger District
Attention: Susan Marthaller
3031 Tongass Avenue
Ketchikan, Alaska 99901

Dear Madam:

Gravina Island offers good hunting for deer, bear, and other wildlife. Its surrounding marine environment offers shellfish, halibut, seal, beach asparagus, goose tongue, seaweed, and many other marine based plants and animals. Most of the activities are within only ½ hour or less by boat. This has been a customary and traditional use area for countless generations to our ancestors and will be depended on for at least the next seven generations to provide all the various needs.

Any logging, new roads or barge facilities, vacation lodging, cabins and so forth will put an end to the previously mentioned activities that the Tribes members and other Tribes of the area depend on to offer religious, spiritual, and cultural & traditional survival. This will also have a negative impact on tribal peoples who use the area for subsistence and personal use. Communities of Ketchikan, Saxman, and Metlakatla place a high value on the Bostwick drainage and marine area as it is integral to the community's well being.

CT-3

There is a high possibility that archeological sites and gravesites exist in the area and would be threatened by additional presence from access by unknowledgeable or disrespectful people.

CT-4

The State of Alaska, Borough of Ketchikan, and numerous private landowners are a significant presence on the northern portion of the island facing Ketchikan. Until these entities have fully contributed to the economics desired by communities, national forest system lands should not be used as a first resort or solution. Much as

CT-23

April 25, 2001

an individual looking for a special land use permit is asked this question of 'have you tried elsewhere before coming here?' the forest service needs to ask itself if the State and Borough have made EVERY attempt to contribute to the needs of the economy before going to the island.

We ask you that you select the 'NO ACTION' alternative on Gravina Island for Bostwick Inlet.

Sincerely,

<u>Name</u>	<u>Signature</u>	<u>Date</u>
Martin Perez sr.	Martin Perez sr.	4-29-01
Dorothy Unerberg	Dorothy M Unerberg	5-1-01
FREDA LLANOS	Freda Llano	5-4-01
Karen Huff	Karen Huff	5-04-01

<u>Name</u>	<u>Signature</u>	<u>Date</u>
Martin Perez sr.	Martin Perez sr.	4-29-01
JUANITA STANLEY	Juanita Stanley	5-1-01

Saanya Kwaan Teikweidi Hootz
Clan Leaders and Mothers

Appendix B

Chip Porter
P.O. Box 7844 Ketchikan, AK 99901
907 225-2447

RECEIVED

MAY 03 2001

Ketchikan-Misty Fiords
Ranger District

Mr. Jerry Ingersoll
District Ranger
Atten: Gravina Island

Dear Jerry:

Once again here is our take on the Gravina sales. We have no problem with responsible logging. Our exception is logging off Ketchikans view shed. Just doesn't make sense to us at all. Sure they will grow back but not in our lifetime. My god, we were in Kasaan a few weeks back and just couldn't imagine or believe what the Kavalco people did to their front and back yards.

CT-6

We should have you out for lunch so you can see for yourself how our view will be impacted. We live above Rotary Beach. Unlike the example in the DEIS from Mountain Point light, our view looks down and across to the sales above Stomach Bay and behind the airport. There are many of us now that will have views forever of the clearcut areas. Forever for us anyway. People from the Homestead, Rotary Beach, Gold Nugget, Shoup Street, Saxman and Forest Park not to mention the entire City area. Some people don't seem to care, it's true, but then some people don't marvel at the changing colors of the day. Some people throw their trash in the ditches between our house and town. But this doesn't strike us as a good deal either.

CT-6

We hope there will be away to stop Mental Health too but if you put in the roads they will come. Those roads will be the beginning of their access. It's what they are waiting for.

CT-23

After 10,000 logging free years it seems ironic to start now especially with tourism becoming the towns' new lifes blood.

If the logging does happen, and we obviously hope it doesn't, when you do the helicopter shows, please don't log the sales with straight boundaries. If they were staggered and uneven they would show up much less, especially during winter.

CT-6

Thank you for your time and interest.



Chip Porter and Evon Zerbetz

340 Gold Road

Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Avenue
Ketchikan, AK 99901

RE: Gravina Island Project Area Draft Environmental Impact Statement

Dear Jerry,

I support the timber harvest planned in the Gravina Island DEIS. I also support the comments provided by the Alaska Forest Association.

CT-12

Sincerely,

The following individuals each signed and sent a copy of this letter to the Forest Service.

Earlene Ingraham, Ketchikan, AK, 99901
 Georgia Brown, Ketchikan, AK, 99901
 Juaneta Cannon, Ketchikan, AK, 99901
 Richard Madden, Ketchikan, AK, 99901
 Eric Taylor, Ketchikan, AK, 99901
 Dayna Hert, Ward Cove, AK, 99928
 Gigi Cowan, Ward Cove, AK, 99928
 Sandre Ireland, Ketchikan, AK, 99901
 Cindy Balzer, Ketchikan, AK, 99901
 Alicia Sturgess, Ketchikan, AK, 99901
 Heather Johnson, Ward Cove, AK, 99928
 Cynthia Gardiner, Ketchikan, AK, 99901
 Debra Hilton, Ketchikan, AK, 99901
 Michael Medford, Ketchikan, AK, 99901
 Todd MacManus, Ward Cove, AK, 99928
 William Arbaugh, Ketchikan, AK, 99901
 Lila Greer, Ketchikan, AK, 99901
 Dana Cary, Ketchikan, AK, 99901
 Jim Moran, Notre Dame, IN, 46556
 Kirk Dahlstrom, Craig, AK, 99921
 Donna Oldfield, Craig, AK, 99921
 Cheryl Hallman, Ketchikan, AK, 99901
 Mike Jausoro, Ketchikan, AK, 99901
 M. Harper, Ketchikan, AK, 99901
 Erin Burd, Ketchikan, AK, 99901
 Kathy Sneller, Ketchikan, AK, 99901
 Pamela Sukert, Ward Cove, AK, 99928

Debra Enger, Ketchikan, AK, 99901
 Rachel Moreland, Ketchikan, AK, 99901
 Kim Netling, Ketchikan, AK, 99901
 Wayne Valentic, Ketchikan, AK, 99901
 D. Stidd, Ketchikan, AK, 99901
 William U., Ketchikan, AK, 99901
 Lisa Sayer, Ketchikan, AK, 99901
 Audra Messegee, Craig, AK, 99921
 Creva Juntunen, Craig, AK, 99921
 Henry Williamson, Craig, AK, 99921
 Gladys Panama, Ketchikan, AK, 99901
 Janalee Minnich, Ketchikan, AK, 99901
 John Clifton, Ketchikan, AK, 99901
 Jack Vaughn, Ketchikan, AK, 99901
 Angela Troupe, Ketchikan, AK, 99901
 Becky Hogan, Ketchikan, AK, 99901
 Richard Olmstead, Ketchikan, AK, 99901
 Michelle Brown, Ketchikan, AK, 99901
 Samantha Bass, Ketchikan, AK, 99901
 Lisa Morgan, Ketchikan, AK, 99901
 Richard Galaktinoff, Ketchikan, AK, 99901
 Edy Williams, Ketchikan, AK, 99901
 Patti Hert, Ketchikan, AK, 99901
 Gary Makua, Ketchikan, AK, 99901
 Josie Cain, Ketchikan, AK, 99901

Appendix B

Thomas Puchlerz
Forest Supervisor
648 Mission Street
Ketchikan, AK. 99901
(907)225-3101
Fax. 228-6215

Dear Forester,

This letter of comment is to express my concerns for the environmental impacts that will effect the subsistence resources in the Boswick Cove and stream drainage, due to the proposed timber sale on Gravina Island. CT-3

My suggestion is to **"No Action"**, no action is the only alternative that best addresses the subsistence concerns I have. CT-12

The following individuals each signed and sent a copy of this letter to the Forest Service. Some individuals added their own comments, which are also included below:

Chris Alvarado, Ketchikan, AK, 99901
Richard Makua, Ketchikan, AK, 99901
Tina Makua, Ketchikan, AK, 99901
Julie Nanez, Ketchikan, AK, 99901
James Nanez, Ketchikan, AK, 99901
Dro Winter, Ketchikan, AK, 99901
George Winter, Ketchikan, AK, 99901
Cecelia Johnson, Ketchikan, AK, 99901
Racheal Milne, Ketchikan, AK, 99901
Michael Milne, Ketchikan, AK, 99901
Kathy Kouba, Ketchikan, AK, 99901
Wanda Watson, Ketchikan, AK, 99901
James Gillian, Ketchikan, AK, 99901
Betsy Booth, Ketchikan, AK, 99901
Priscilla Schulte, Ketchikan, AK, 99901
Dolly Garza, Ketchikan, AK, 99901
Victor Edenso Jr. Ketchikan, AK, 99901
Bruce Dixon, Ketchikan, AK, 99901
Victoria McDonald, Ketchikan, AK, 99901

As a life long resident I have very fond memories of Vallenar Bay - especially in my youth. I do not think this pristine environment should be subject to the ravages of logging and development. I think there are other less utilized spots that would be far better. Thank you for your consideration.

CT-8

Name Bruce DixonAddress 123 Mt Ash HtsKetchikan AK 99901Phone 247-4330(W) 225-0134(H)

Sincerely,

Bruce Dixon

Gravina Island contains many archeological treasures which must be catalogued before road layout or road building.

CT-4

In addition, subsistence usage must be considered before any timber harvesting can be allowed.

CT-15

Name

Victoria McDonald

Address

6526 Rogers Pass

Ketchikan, AK

Phone

225-6526

Sincerely,

Victoria McDonald

It's a home away from home - a good place
for family gathering or meeting; gathering
foods or memories - What more do you
want to take?

CT-3

Name Betsy Booth - Isimshin from Metlakatla Alaska
Address P.O. Box 8453

Phone 247-8453

Sincerely,

Evangelina B. Booth

My daughter's family has used this area for food resources for many years. The proposed timber sale in this area would jeopardize these resources. CT-3

Name Priscilla Schulte

Address P.O. Box 5721

Ketchikan AK 99901

Phone 225-7349

Sincerely,

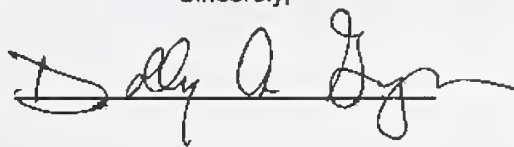
Priscilla Schulte

Boswick has been used by many
Kutchikan families for the last
100+ years. It is close enough
that people can take families
and enjoy the area.

CT-3

Name Dolly Garza
Address Bx 7604
Kta AK 99901
Phone 907-247-5914

Sincerely,



BOSTWICK INLET IS USED FOR SUBSISTENCE,
"HOME-USE," DUNGENESS CRABS, ALSO, GRAVINA
ISLAND, HAS BEEN AND STILL IS USED FOR
"HOME-USE," DEER HUNTING, ON ALL SIDES, EXCEPT
NEAR THE KETCHIKAN INTERNATIONAL AIRPORT, PLUS
"CLAM-DIGGING," "BERRY PICKING" IS ALSO DONE, ON
ALL SIDES OF THE ISLAND.

CT-15

Name Victor Edenso Jr.

Address P.O. BOX- 8204

KETCHIKAN, AK, - 99901

Phone 1-(907)-225-4039

Sincerely,

VICTOR EDENSO JR.



March 15, 2001

Mr. Tom Puchlerz, Forest Supervisor
Tongass National Forest
Federal Building
Ketchikan, AK 99901

Re: Gravina Island Timber Sale, DEIS

Dear Mr. Puchlerz:

Sealaska Corporation appreciates being given the opportunity to comment on the above referenced sale. Sealaska supports a substantially modified Alternative 5, which is preferred in the DEIS. Sealaska agrees that this alternative provides the largest amount of volume while maintaining all other amenities, including indicator species, at a continued high level. The forest products industry is fighting to stay alive because past Forest Service actions have reduced the supply of timber for sale to record low levels. The industry needs this sale and others to come in order to provide employment while still meeting other amenity needs. Sealaska urges that the Forest Service implement Alternative 5 with our suggested modifications in an expeditious manner.

The Sealaska analysis has determined that a combination of Alternatives 2 and 4 with further modifications will provide the greatest net stumpage income while protecting deer habitat, staying out of old growth reserves, protecting salmon streams, and providing hunter and recreation access for a limited time. This can be accomplished by doing the following:

CT-12

1. Include all of the enumerated harvest units displayed on the maps for alternatives 2 and 4 except number 5.
2. Provide road access to units, 7, 14, 20, 23, 28, 100-102, 36, 40, 46, 48, 54, and 56. Well constructed roads will not adversely effect the habitat or water quality.
3. Provide road access to units; 58 – 71, and 104. Some or portions of these units can still be helicopter harvested if conventional systems will not leave appropriate residual trees and habitat or viewshed requirements. However, most of the harvesting can be conventional.
4. Provide road access for all of the helicopter units on the south point of Gravina Island and south of the private holding. Many of these can be harvested conventionally and the rest can be helicopter logged using economical turn

CT-25

Appendix B

distances instead of the excessive helicopter turn distances that would be required. In addition, there is a better opportunity to concentrate the drop points along a road for truck hauling to an LTF such as in Seal Cove. The use of Seal Cove would be a good LTF site because it would be more difficult to discern from the open water.

CT-25

5. Secure an easement across the private property to access units 73, 74, 77 – 79. If securing an easement cannot be accomplished, a helicopter drop will have to be established in Seal Cove as opposed to using a more economical LTF. However, the most cost effective plan would be to modify the large old growth reserve so that a road could be built across it in order to access all of the units on the very south portion of Gravina Island.

CT-25

6. The road across Gravina Island from Tongass Narrows should be built, but not as part of the Gravina sale(s). Applying the road to the sale(s) is uneconomic. All of the sale volume should be hauled to Bostwick Inlet, and Seal Cove if necessary. In addition, eliminating the cross-island road provides all potential bidders with an equal opportunity to bid on the timber instead of favoring one potential bidder whose mill would have direct access. The Forest Service will receive more net stumpage money than would be the case with the cross-island road.

CT-7

7. Retain the LTF instead of pulling the shot rock, etc. State agency landowners and recreationists can then use it. There are ways to build LTFs whereby some measure of fish protection is retained in than part of the intertidal area.

CT-19

8. Maintain the appropriate parts of the resulting road system only if the State of Alaska landowners want to use it for development purposes. If that is the case, enter into an agreement that allows them to participate in maintenance thereby reducing costs to the Forest Service. If the State owners want the road system exclusively for timber access then after they have extracted their timber, the road could be considered for retirement.

CT-23

Environmental

Drive down ramp LTFs occupy much less than ¼ acre of the intertidal area. In addition, the relatively small volumes contemplated for each LTF, as recommended by Sealaska, would result in very little deposition of bark and debris in the water body. Sealaska has experience with such LTFs where over 50 million board feet have been placed in the water and less than ½ acre has received bark deposition as defined by the State of Alaska. Much of the deposition is disbursed within 5 years from the time an LTF is retired.

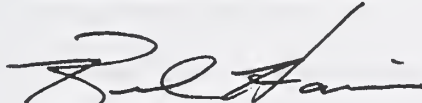
The Sealaska proposal anticipates more road construction than the Forest Service alternatives. However, BMPs, including restrictions when salmon are expected to be in streams, are more than adequate to minimize instream habitat risks. All bridges would be short to medium span, and careful location can eliminate the need for construction below the one-year flood level. Therefore bridge approaches and abutments would affect

instream flows a very few disbursed days each year. In addition, properly followed BMPs would minimize instream turbidity due to the very small amount of suspended solids that might enter a stream and wash through spawning gravel. The minimum 100-foot buffer strips effectively eliminate timber harvest residues and are more than adequate to provide streamside habitat and future large woody debris. Therefore the increased road miles that would result from the Sealaska proposal would hardly affect class I-III streams. In addition, by not constructing a road across the island, vehicular impacts would be reduced, thereby benefiting game and other animals.

Thank you for giving Sealaska the opportunity to respond to the Gravina Island Sales DEIS.

Sincerely,

SEALASKA CORPORATION



Richard P. Harris
Senior Vice President
Natural Resources

cc: Alaska Forest Association
STC – Bob Girt
Ron Wolfe
Ketchikan Gateway Borough
City of Ketchikan
Representative Bill Williams
Senator Robin Taylor
Governor Tony Knowles

RECEIVED

MAR 22 2001

Ketchikan-Misty Fjords
Ranger District

Statement by Bernard S. Guthrie

Box 98

Metlakatla, AK 99926

5/15/01

This hearing regarding logging on Gravina Island should be cancelled, Never ever to be considered again. It always goes against us. It is used in common by the Indian people and especially the Tsimshian tribal members of Metlakatla.

CT-15

Because they live by the seasons. This logging on Gravina will destroy habitat of animals, fish & trapping. We utilize the land with common sense, receiving only our needs, we barter with one another daily to exist.

CT-5

Only conclusion I can arrive at, are that these hearings make your agency and other agencies working together look good.

The more you accomplish, the more money you make, especially when it goes against the Indian people's subsistence.

We are the common people, with a common goal. We preserve what nature has provided, never destroying the habitat.

So, we are the only ones with common sense. The Government ^{agencies} with all their Bachelors, Masters and Doctors ^{degrees}, all professional

people & ^{no} common sense. They think in terms of money. They don't fish, hunt or trap for living.

So Cancel & never consider again.

February, 2001

Subsistence Hearing

Larry and I were privileged to attend a public hearing on subsistence issues taken by the U. S. Forest Service, presided over by Jerry Ingersoll, District Manager, on February 13, 2001 at the MIC Council Chambers. Unfortunately, we did not hear about it until that morning, and there were only a few people who attended due to the fact that no one seemed to have received notice that there was a meeting pending.

However, in spite of that, attending this meeting and able to testify were myself and Larry, Louie Wagner (councilmember), Judith Lauth, Pat Beal, Tom Lang, Casey Nelson, Barbara Fawcett. This hearing and our input were extremely important for the following reasons. First, the Forest Service is contemplating logging on Gravina, with a possible log removal site at Bostwick Inlet. In the Draft Environmental Impact Statement the Forest Service sets forth five proposals, from no action at all to helicopter logging. I strongly urge anyone concerned with subsistence to closely examine the DEIS. There is at least one copy at the Council Chambers. Second, there are many, many people from Metlakatla and other areas, such as Saxman and Ketchikan, who use Gravina for hunting and shellfish subsistence gathering. Any kind of action cannot help but have an adverse effect upon our subsistence gathering. Finally, if people do not use this opportunity provided by a public forum to state their beliefs as far as subsistence is concerned, that opportunity will be lost.

CT-15

The people who attended the meeting were nearly unanimous in their pleas to the Forest Service to not select any sites on Gravina for logging. Understandably, some major logging businesses in the Ketchikan area are pushing for such a selection. However, as I pointed out in the hearing, the Forest Service has a formidable responsibility to weigh short-term economic benefits to a handful of companies whose goal is to show a profit, against the livelihood of many people who depend on the Bostwick Inlet area for subsistence food. It isn't just people from Metlakatla who need this subsistence area, but many other natives from Ketchikan and surrounding areas and non-natives as well.

CT-7

There is an incredibly diverse and complex ecosystem in the Bostwick Inlet area. This system supports a multitude of marine life, from seagrass beds as a habitat for crab and other animals, to clam and cockle beds, abalone, shrimp, squid, salmon, and in the forests of Gravina Island, the deer and bear. That region always has been a place for our people to go to for many of the food items we place upon our tables. In the times of our grandfathers, our people had camps there. Archaeologists recently have found at least 39 sites there as evidence that natives have used that region for several thousands of years. In short, we have always been able to depend on that site for not only a good portion of our food supply, but for traditional use as well! Are we going to lose it now to a small group of business people who are only looking at their short term bottom line? Can we afford that?

CT-3

CT-4

Once this area is destroyed, it will not come back in our lifetime. Forest Service representatives, timber industry people and others on the other side of the issue will use phrases such as "we will take pains not to harm the environment", and "the forests are a renewable resource" and so on and so forth. How often have the facts proven to be otherwise? Yes, the forests will grow back, but how long will it take for them to get to the condition they are in now – as a place where deer and bear can live and where we

CT-7

can hunt for our food? Ten years? Twenty? Thirty? It is more reasonable not to expect them to be back into pre-logging condition for at least fifty years. As far as the timber industry adversely affecting the forests and other area, it has been more typical for these industries to make irreversible mistakes while no one is looking, and then apologize for them later. The fact is, once these concerns have caused an environmental disaster (like wiping out the crab beds at Hemlock) it really doesn't matter how sorry they are. The damage is done, it's irreversible, and we can never get them back again.

CT-7

I hope that some of you who read this article will be concerned enough to write to the Forest Service and make your concerns known in no uncertain terms, as we did at that meeting. Here is the person to write to:

Jerry Ingersoll
District Manager
U. S. Forest Service
3031 Tongass Avenue
Ketchikan, Alaska 99901

The deadline for public comment is March 19, 2001. Sit down, get your pen and papers out and drop them a line. Don't worry about how your letter looks or sounds, as long as you make your concerns known, that's all that matters. Good luck, and if you need any help, give me a call.

Your friend,
Lindarae Shearer, 886-4133

ADDENDUM TO ABOVE ARTICLE:

When published last month, I indicated in the foregoing report that the deadline for public response was March 19, 2001. Since then the U. S. Forest Service has extended the public comment period to June 26, 2001. Anyone interested in preserving our subsistence sites on Gravina should write their opinions to the individual indicated in the report!

STORMY CSII
<stormycsii@yahoo.com>

To: smarthaller@fs.fed.us

cc:

05/15/01
03:15 PM

Subject: Fwd: ".. Gravina

Note: forwarded message attached.

.... and, I think I forgot to add the comment as to what one of the preacher'd preached "when Christ returns, we'll all be floating by waving @ each other"??? I don't think so, but, as I'd said everyone is entitled to an opinion; my mother's version of 'HELL', the center of the earth, I don't want to burst her bubble either, and, she IS entitled to her own opinion... but, I hope my comments are a big help.....

EVERY TREE COUNTS

.. . As I'd told National Geographic concerning 'global warming' .. they'd said "EVERY person counts", me, I'd said "EVERY TREE counts"... on the 'chat' line, @ first this fellow says he's in Europe, further into the conversation, Germany, but says something like "Then why are you chopping down ALL the trees", Me, I'd said "Not I, the Indian, it is the white government" ... he says there aren't very many trees in Europe, just in two places ... originally, we were talking technology, that there is too much, and, that that is what's going to kill our planet, and, not the weapons. ... true, 'cause they want to put 44 THOUSAND TONS waste in Utah, Utah doesn't want. I don't blame them; Japan has 18 reactors, wants to cross 3 oceans, the Pacific, Arctic, Atlantic oceans, to recycle in Britain, then back, TWICE AS TOXIC, me, I'd hate to see a nuclear 'titanic', Mr. Gates need\$ to buy them a nuclear recycler??? Yes, I say "EVERY TREE COUNTS" (as a little girl I remember eating pine needles, and, spruce, and, as funny as it may sound ... with all this technology, and, if this planet goes on, and there are survivors, we'll probably BE "eating the leaves of the tree", that verse IS in the Bible, somewhere... Me, I'd made a promise That I'd try to turn our so-called world leaders around, for the sake of my children, I know we can "go" any second, BUT IF OUR SO-CALLED LEADERS realized the seriousness of 'HELL', I truly think this planet could go on another 80 years AT THE MOST IF THEY ALL AGREE TO GET ALONG; yes, I'd like to know my children ARE going to live this planet in one piece, and gracefully... and, the question I think should be asked our so-called world leaders "IS THERE ENOUGH MAGNITUDE ON THIS PLANET TO CHAIN REACT/IGNITE THE STARS INTO AN UNDISTINGUISHABLE FIRE", the "lake" "souls burning FOREVER"? It IS 'GOD's UNIVERSE, 'HE' can do whatever 'HE' wants.... 'cause evidently, obviously, eventually, HOPEFULLY NOT in our, or OUR CHILDREN'S lifetime, this planet IS going to 'go', and NOTHING IS GOING TO STOP IT??? (In HS SCI, I's taught 'NOTHING can contain a nucleus', so all those weapons that aren't blasted will? eventually leak? And, those that 'live by the sword shall die by the sword'? Now, I hate going into ALL THESE subjects, but, I truly think it all ties together??? The last couple years I did not chop down a tree for Christmas, although I did decorate a 'fake' tree... my hus says "get a tree" "no, you want one you get one & decorate it yourself" "but the baby needs one" "no, that baby'll need that tree 50 years on down the line to breathe" .. made me wonder HOW TALL ALL THE TREES THAT HAVE BEEN CHOPPED DOWN IN THE PAST, HOW TALL THEY'D NOW BE (I don't need a tree to accept a gift... and, speaking of gifts, we are wrapping our gifts with 'trees') So, that was what the German fellow says, an 'Italian priest says, "I'll proposition the United States government in the fall, if they do not coincide they will die"??? and "someone has to go in there & get the job done quickly" (hopefully not according to Isaiah); and, speaking with 'Mormon' on the chat, he says "you JUST WANT POWER, YOU KNOW WHAT YOU ARE DOING", "NO, I don't want "power", I don't even want to be known, I made a promise, I'll not give up... yesterday a fellow tells me : "about books there are three prevalent books all similar about what horrors the future would bring each describing technology that didn't exist @ the time each from a different country and different time but the message was the same this is where you are all heading if you don't change"??? Yehh, I truly think there IS time, yet, "for change", and, sooner, the better??? But, going on, reading the paper, once more, RUSSIA wants to talk @ the "highest level", rereading REVELATIONS, it says "leave the oil & wine", one of the chatterers makes fun Jesus, turning water into wine, defending Jesus, I say "water'll be wine with all this pollution, and, you here of "rare" wine?" But, can't our melting ice cubes up there BE drinking water??? So, if the 'knights of the round table', the UN BUILDING decide they "war", I think it should be agreed upon to LEAVE ALASKA ALONE, WE ARE THE "OIL & THE WINE", our water is still clean, our air, still clean??? Cleaner than the rest of the worlds???? I really don't think

CT-10

Appendix B

there is 'need' for war, we need to agree on a LOT, like we don't need more children, and who wants to KNOW THAT THEIR CHILD(ren are going to suffer anyway Not much of a FUTURE??? Someone had said, "well the planet'll die off", it's going to die anyway???? Yes, the Indian has had NO SAY, NOT FAIR, have no country .. although we were 'ARMAGGEDONED', the "bridles bath war", the ones "bon marched", that is the PAST...it is the FUTURE to be concerned???? To the mormon, I can see why? he'd get upset, I'm telling him that it is America that is the "burning nation" in the bible, not to offend; hopefully, to the 'priest', to "leave America alone and NOT BLAST them away". .. BLESSED ARE THE PEACEMAKERS....??? there is NO TRUE PEACE n this planet.... NO 'LOVE' .. we are all 'fighting one another'? But, one comment, my people never should have been sent to war, after losing an entire continent, the bloodiest, most unfair battle there ever was, but it is "nation against nation""brother against brother" (I've told my people descended from Korea, to 'OLD Metlakatla', by Kong, and Capt. Yang off the lumber ship, Onward... so they ARE my 'brother' .. and, as in REVELATIONS, they do have an army of 200 million AND, they'd told me those lumber ships only came in twice a piece, large fleet, those ships didn't just come to my island ... I'd hate to be their enemy, I am on the 'front lines' ... and as in my last letter, they'd must've accidentally left their pack cigarettes, and, that must be WHY? they'd come back to my house the next day :

cigarette brand :

R H P I

% % % %

O / 2 2 / o O A GREAT BIG ZERO to 220? _____ (I should have saved the pack, this was 15 years ago, my son was one @ the time) Anyway, mtc ZERO WAS LARGE, twice the size the other numbers, and, the first line was just as large as the ZERO... the other numbers were half the size. .. the best I can draw ..

(anyway, I am PISCES, supposedly 'perceptual' 'psychic' ... I do not profess to know the future, but I have shared my conversations. ..

signed, the 'mysterious woman', your Indian Princess... 'Stormy'....

~ peace ~ (there are other writings, just ask, I'll 'forward'...

~ EVERY TREE COUNTS ~

e-mail Alaska Rainforest Campaign website form letter:

Dear Mr. Jerry Ingersoll, District Ranger,

Please accept the following as my official comments on the Gravina Island Timber Sale. The sale proposes to enter the pristine 37,000-acre Gravina Roadless area in direct violation of the National Roadless Rule and the US Forest Service's commitment to protect roadless area values. For this reason I request any further planning or action on this sale be stopped.

CT-1

In addition to the irreplaceable harm this sale will have on the wilderness character of the area, the sale poses great threat to the historical, cultural and recreational values of this area. The timber sale will harm the nearby native communities of Metlakatla and Saxman by restricting their use of the area for their traditional hunting, fishing, and plant gathering activities. The sale area also contains significant Alaska native historical and cultural resources including sacred burial sites and historic fishing camps dating back more than 3,000 years, which could be damaged or lost as a result of the proposed development.

CT-2

CT-3

CT-4

Lastly, logging and road building in this roadless area will damage important fish and wildlife habitat including that of that of the Alexander Archipelago wolf; coho, chum and pink salmon; black bear; Sitka black tailed deer and nesting bald eagles. This will result in restricting use of the area by residents and visitors as a place to hunt, fish, and recreate.

CT-5

CT-6

I support the no-action alternative as the only one that will protect this pristine area.

CC:
Forest Service Chief, Dale Bosworth

This letter was copied from the Alaska Rainforest Campaign website and sent via e-mail to the Forest Service.

Appendix B

e-mail Sierra Club website form letter:

Dear Mr. Ingersoll,

I am deeply concerned about proposed logging on Gravina Island in the Tongass National Forest. Logging in this area would cause irreparable harm to the wilderness character of the area and would harm the recreational value of the area, where visitors like to camp, fish, kayak and hike. The Gravina Timber Sale is in direct violation of the National Roadless Rule and the US Forest Service's commitment to protect roadless area values.

CT-2 / 6

CT-1

The timber sale poses grave threats to the historical and cultural values of this area. The timber sale will harm the nearby native communities of Metlakatla and Saxman by restricting their use of the area for their traditional hunting, fishing, and plant gathering. The sale area also contains significant Alaska native historical and cultural resources including sacred burial sites and historic fishing camps dating back more than 3,000 years, which could be damaged or lost by the proposed development.

CT-3

CT-4

Lastly, logging and road building in this roadless area will damage important fish and wildlife habitat including that of the Alexander Archipelago wolf; coho, chum and pink salmon; black bear; Sitka black tailed deer; and nesting bald eagles.

CT-5

I support the no-action alternative as the only one that will protect this pristine area and request you stop further planning or action on this timber sale.

Sincerely,

This letter was copied from the Sierra Club website and sent via e-mail to the Forest Service.

e-mail Defenders of Wildlife website form letter:

Dear Chief Bosworth:

I urge you not to allow the cutting of timber on Gravina Island or on other proposed logging sites in the Tongass National Forest.

CT-8

The Tongass National Forest is a special place that Americans cherish. Logging would harm the animals that depend on the forest for survival.

CT-5

We cannot allow the timber industry to exploit this wild land for commercial gain. The American public won't stand for it.

CT-7

You have stated that you are committed to protecting our last remaining wildernesses. Please keep your word.

CT-2

Sincerely,

This letter was copied from the Defenders of Wildlife website and sent via e-mail to the Forest Service. Although addressed to Chief Bosworth, they were e-mailed to the Ketchikan Ranger District.

STATE OF ALASKA

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF GOVERNMENTAL COORDINATION

TONY KNOWLES, GOVERNOR

CENTRAL OFFICE
P.O. BOX 110030
JUNEAU, ALASKA 99811-0030
PHONE: (907) 465-3562
FAX: (907) 465-3075

June 26, 2001

Ms. Kathy O'Conner
Ketchikan-Misty Fiords Ranger District
U.S. Forest Service
3031 Tongass Avenue
Ketchikan, AK 99901

Email to cgrundy@fs.fed.us, for Kathy O'Conner

Dear Ms. O'Conner:

SUBJECT: Gravina Island Timber Sale DEIS and Federal Consistency Determination
State I.D. No. AK0101-12J
DEIS NEPA and Preliminary ACMP Reviews

On 1/29/01 the Division of Governmental Coordination received a Draft Environmental Impact Statement (DEIS) for the Gravina Island timber sale project, to satisfy the requirements of the National Environmental Policy Act (NEPA). Also, according to the State/Forest Service Memorandum of Understanding, the Forest Service submitted a federal consistency determination. The State initiated State review of the project, based on federal coastal zone management regulations, for preliminary consistency comments, and to prepare NEPA comments.

Request for Extension. Though we started the State's review, the State formally requested, in our 2/22/01 letter, an extension of the comment deadline, as follows:

"DGC requests an extension of the comment deadline until after 4/10/01 or other time of resolution of the Roadless Rule, based on the following reasons: ... (3) The timber sale does not comply with the recent federal Roadless Rule, as the Notice of Availability was not published by the 1/12/01 deadline. The Forest Service has chosen to proceed with the project in case the Bush administration and Congress overturn the Roadless Rule before it becomes effective on 4/10. The State agencies desire to expend time reviewing projects that have a certainty of implementation."

CT-S

I never received a response to the request for extension. On 3/5/01, the Forest Service issued an extension letter extending the comment deadline to 6/26/01, to "provide more time to review the DEIS while questions about the National Roadless Conservation Rule are addressed." As of this

time, we have not seen any address by the Forest Service to the Roadless Conservation Rule, or the State's request to extend the review because the State was unwilling to spend time reviewing something that may not be implementable. I explained on the phone on 6/20 and 6/21 that the State agencies are united in this concept, as valuable time would be wasted if the State reviewed a project and then it could not be implemented due to the Roadless Conservation Rule. **We continue to request an extended comment deadline date.**

Project description. The activity subject to this review is harvest of timber and roads on federal land on Gravina Island, in the Ketchikan-Misty Fiords Ranger District of the Tongass National Forest. Gravina Island is west of Ketchikan. The proposed action would cut 37 million board feet of timber from 2,218 acres of forest land and construct 22.6 miles of new road in an inventoried roadless area on Gravina Island. Other action alternatives would harvest 12–32 mmbf from 800–1,800 acres, and construct 0–22 miles of new road. The value comparison units in the Gravina sale are: 7610, 7620, 7630, 7640, and 7650.

The Forest Service has determined that this activity will affect the coastal zone per 15 CFR 930.30, and that the activity will be conducted in a manner consistent to the maximum extent practicable with the enforceable policies of the ACMP. Per the State/FS Memorandum of Agreement, following the concurrent public comment periods for the NEPA review of the DEIS and the Alaska Coastal Management program review, the State is responding to the FS with NEPA and preliminary ACMP comments.

The next step is Forest Service consideration of all comments received on the DEIS and refinement of the preferred alternative, and prior to publishing a FEIS and ROD, the FS will describe any proposed changes to the DEIS Preferred Alternative in a document called the "Project Clarification" and provide the description to DGC and resource agencies. Subsequently, the State will have 60 days to agree or disagree with the FS consistency determination (the official State ACMP consistency response). To accommodate the procedure in the MOU, DGC may "stop the clock" for review AK0101-12J and continue the review when we receive the final description of the proposal, or we may assign a new file number.

CT-S

Additional Information desired regarding coarse-canopy. As explained in our 2/22/01 startup letter, on 2/14/01 the Department of Fish and Game (ADF&G) said the information received was sufficient, with one exception: the ADF&G believes it is important to have information on location of coarse canopy/big tree stands to meet item B2 of Attachment 1. Tongass Forest Supervisor Puchlerz, in a November 28, 2000 letter on issues surrounding the proposed Emerald Bay timber sale, laid out two conditions for providing coarse- canopy information: "the FS [will] provide coarse-canopy information when the methodology for conducting that analysis is accepted in the scientific community and results become available across the Forest." We explained that we understand that John Caouette of the Forestry Sciences Lab has recently published a peer-reviewed Forest Service General Technical Report about the timber database

CT-13

Appendix B

Gravina TS DEIS
AK0101-12J

Page 3

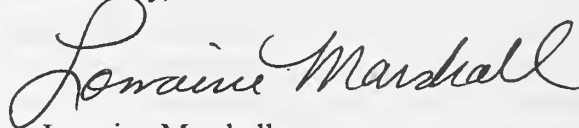
6/26/01

which indicates that Puchlerz' two conditions have been met. We urged you to provide the associated information pertinent to item B2 of Attachment 1 in the CZMA MOU; however, I am not aware of any further discussion of this after the State's startup. Thus, we reiterate that it is essential that a meeting be held soon to ensure that there is a common interagency understanding of the interagency application of this data to NEPA compliance and State CZMA review.

Preliminary ACMP comments. The preliminary ACMP comments may be found within the enclosed comments of ADF&G and the Ketchikan Coastal District (ADF&G by email; Ketchikan Coastal District by fax). The Department of Environmental Conservation and the Habitats Restoration Division of ADF&G were unable to provide a comment due to workload, and may submit late comments. (As of today, I am unable to print this document, given we are in the middle of a move to our previous office.)

Please contact me at 907-465-8790, or email lorraine_marshall@gov.state.ak.us if you have any questions.

Sincerely,



Lorraine Marshall
Project Review Coordinator

Enclosure (ADF&G comment by email; Ketchikan by fax)

cc: Kevin Hanley, DEC
Jack Gustafson, DFG
Bill Hanson, DFG
Tom Paul, DFG
John Hill, DFG
Buck Lindekugal, SEACC
Rex Blazer, DGC

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Gravina TS DEIS
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6/26/01

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME DIVISION OF WILDLIFE CONSERVATION

TONY KNOWLES, GOVERNOR

P.O. Box 240020
Douglas, AK 99824-0020
PHONE: (907) 465-4358
FAX: (907) 465-4272

26 June 2001

Cathy O'Connor
Ketchikan-Misty Fjords Ranger District
US Forest Service
3031 Tongass Avenue
Ketchikan, Alaska 99901

Dear Ms. O'Connor:

ADF&G Division of Wildlife Conservation has the following consolidated ACMP/NEPA comments for the proposed Gravina Timber Sale (DGC file number, AK0101-12J) on Gravina Island near Ketchikan. Because Division of Governmental Coordination is moving offices today and is disconnected from the electronic communications system, Lorraine Marshall requested that I send these comments directly to you to be treated as part of the State of Alaska comments.

The proposed action would cut 37 million board feet of timber from 2,218 acres of forest land and construct 22.6 miles of new road in an inventoried roadless area on Gravina Island. Other action alternatives would harvest 12-32 mmbf from 800-1,800 acres, and construct 0-22 miles of new road.

NEPA

Division of Wildlife Conservation prefers Alternative 5 of the action alternatives. It does not add road miles, has the fewest acres of clearcuts, and it has the least detrimental effects on wildlife in the project area. We support modifying the small Old-growth Reserves as recommended in the interagency review.

CT-12

It is encouraging to see at least some "partial harvest" acres proposed in all alternatives. However, many of the so-called uneven-aged and two-aged harvest prescriptions such as seed tree, group selection cuts, and two-age cuts with reserves, appear to be essentially smaller clearcuts within the

CT-9

larger unit boundaries. Few prescriptions for harvest acres preserve the forest stand structure which benefits wildlife. In terms of the way timber harvest units are likely to function as wildlife habitat, in this timber sale, the Forest Service appears to be providing few genuine alternatives to clearcutting. More unit prescriptions need to be changed to individual tree selection harvest that retains 50% or more of stand structure (see Kirchhoff 1997, Kirchhoff and Thomson 1998).

CT-9

This is a difficult DEIS to review. In particular, it is one of the few recent timber sale EISes in which clearcut and partial harvest units are not differentiated in some manner on maps. Without this differentiation one needs to consult each unit card to determine harvest prescription for each unit.

CT-9

For a sale of this size, this is a laborious process. We request the FEIS differentiate units by harvest prescriptions (e.g. what percentage of retention in units, as well as prescription) on alternative maps through color-coding, shading, or in some other manner as was done in the Woodpecker and Madan TS EISes.

We disagree that the deer habitat model is likely to overstate the impact of the proposed two-age or uneven-aged silvicultural prescriptions on deer habitat suitability. As noted earlier, many of the other silvicultural systems proposed are likely to function as simply smaller clearcuts. Insofar as the actual acres harvested are used in the model, the affect on habitat suitability should be consistent with the model's prediction.

The FEIS needs to provide an explanation for the discrepancy between the deer habitat capability loss anticipated with this project and those predicted by the TLMP FEIS. In TLMP, the decline in deer habitat capability over the rotation for Alt. 11 (closest to 1997 Record of Decision) on Gravina Island, Wildlife Analysis Area 101, was predicted to be only 7 percent from 1954 capability. The current capability on Gravina is estimated by TLMP to be 97% of 1954, a loss of 3%. The project DEIS (Table 3-37, page 3-108) indicates that the proposed action would reduce long-term deer habitat capability by an additional 10.3%, driving the capability well below that predicted for Gravina at the end of the rotation. Even Alt. 5 with the least effect on deer habitat will reduce capability an additional 4.5%, exceeding the TLMP prediction. It appears that in all action alternatives for the first entry on Gravina, deer habitat capability loss will exceed the levels predicted in TLMP over the entire rotation. This discrepancy may have implications for wildlife and subsistence not only in regard to this project but for TLMP habitat predictions forest-wide. In light of this discrepancy, the FEIS needs to show revised projections for deer and other MIS habitat capability on Gravina at the end of the rotation, and if they differ from TLMP projections, explain why.

CT-18

We find that the particular iteration of the interagency deer model (and other species' models), as well as the way each is used in timber sale analysis, varies widely for timber sale analyses throughout the Tongass National Forest. This makes it nearly impossible to compare effects of sales or to know if effects portrayed in NEPA documents are consistent with the model's design. It also raises

CT-18

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6/26/01

decision-makers. To address these concerns, the Forest Service needs to standardize the use of habitat suitability models and the analyses of their results and make them consistent forest-wide.

ACMP MOU Information

ADF&G remains concerned about disproportionate harvest of rare, coarse canopy, very-high-volume stands. These high-volume stands occur on only 2% of the Forest and are unique community types that often represent high-value wildlife habitat. The Gravina Timber Sale EIS does not identify coarse canopy/large tree stands in the project area. Many of these stands in the Ketchikan area have already been harvested at a rate disproportionate to their occurrence. It is not clear that the Forest Service is making an effort to keep track of coarse canopy/large tree stands. As a result, further harvest of these stands raises questions about whether biodiversity in the Tongass is being adequately maintained. The FEIS needs to show planned timber harvest in the project area in relation to this rare habitat type. The Forest Service has demonstrated on Mitkof Island with the Caouette, et. al. vegetation structure map that mapping these forest types is feasible. The state has requested this information in the ACMP MOU with the Forest Service.

CT-13

Thanks for the opportunity to comment.

Sincerely,

Tom Paul
Research Analyst

Literature Cited:

Kirchhoff, M.D. 1997. Effects of selection logging on deer habitat in Southeast Alaska. Alaska Dept. of Fish and Game. Fed. Aid in Wildlife Restoration. Research Progress Report. Study 2.11. 10 pp.

Kirchhoff, M.D. and S.R.G. Thomson. 1998. Effects of selection logging on deer habitat in Southeast Alaska: a retrospective study. Alaska Dept. of Fish and Game. Fed. Aid in Wildlife Restoration. Research Final Report. Study 2.11. 37 pp.

Cc: Lorraine Marshall
Jack Gustafson

Alaska Forest Association, Inc.



111 STEDMAN STREET, SUITE 200
KETCHIKAN, ALASKA 99901-6599
Phone 907-225-6114
FAX 907-225-5920
Web Site www.akforest.org

June 18, 2001

Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Ave.
Ketchikan, AK 99901

RE: Gravina Island Project Area Draft Environmental Impact Statement

Dear Mr. Ingersoll:

The Alaska Forest Association (AFA) has reviewed the Draft Environmental Impact Statement for the Gravina Island Project, Ketchikan Ranger District, Tongass National Forest. This letter is AFA's response and comments regarding the Gravina Island Project. AFA represents approximately 80 members and 140 associate member companies. AFA, its members, their hundreds of employees and the communities of Interior Alaska depend on the Forest Service to provide economic timber sales of sufficient volume to meet the needs of Alaska's timber industry.

The AFA supports the proposal to harvest timber from the Gravina Island Project Area. The AFA believes that the Forest Service should make the maximum utilization of timber sale opportunities in areas of the Tongass that are designated Timber Production by the Tongass Land Management Plan so that manufacturing facilities in Southeast Alaska have an opportunity to purchase sufficient timber to meet their needs.

CT-7

The AFA supports Alternative 4 with changes explained below. The changes are intended to improve safety during timber harvest operations, to improve timber sale economics and to improve recreational access.

CT-12

The DEIS's purpose and need evaluation for the Gravina Island Project include the following goals:

products from suitable timber lands made available for timber harvest, on an even-flow, long-term sustained yield basis and in an economically efficient manner;

- Seek to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest timber and the market demand for the planning cycle;
- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska; and
- Support a wide range of natural-resource employment opportunities within Southeast Alaska's communities.

AFA urges the Forest Service to offer as much economically feasible timber from the Gravina Island Project area as possible. AFA believes the purpose and need statement for the Gravina Island Project Area should include the following points:

- | | |
|--|------|
| • Timber sales should be designed so they are economic to operate in all market sales because marginally economic sales do not facilitate stable operations and employment; | CT-7 |
| • In choosing helicopter units make sure that the economics of roaded areas are not destroyed. To log units with helicopters that can be roaded can make further road development less economical. Helicopter logging should be used only when necessary; | CT-7 |
| • Good timber management can transform certain decadent timber stands to a managed condition with healthier, faster growing trees; | CT-9 |
| • Good timber management can increase growth and yield from the managed stands so fewer acres are needed for timber harvest in the future; | CT-9 |
| • This project can help achieve the direction, in the Tongass Timber Reform Act, Section 101, to "seek to provide a supply for timber from such forest and (2) meets market demand from such forest for each planning cycle" to the maximum extent consistent with multiple use and sustained yield from all renewable forest resources; and | CT-7 |
| • This project can help establish transportation infrastructure on Gravina Island for future timber harvest and community use. | CT-6 |

The AFA recommends that the Forest Service consider the specific comments in finalizing the Gravina Island Timber Sale(s) Project:

- | | |
|--|------|
| • The first three or four miles of access road from the Tongass Narrows should be constructed with appropriated dollars. This road will access many future sales and get much recreational use. It does not make sense to lessen the economics of the initial timber sale in this area by requiring the construction of this road as part of the timber sale offering; | CT-S |
| • In Unit 4, the clumps of recreation/visual reserve trees on back line should be incorporated into the cutting boundary to avoid isolating any of the timber behind the clumps. Also insure that the North East boundary is located where there are adequate anchor stumps for the planned skyline logging; | |

Appendix B

- In all partial cut units, insure that small groups of trees are cut rather than individual trees. This will lessen the risk of injury to workers from snags and other hazard trees during the harvest activities;
- Drop units 7 & 14 until a road system can be built to within no more than a mile of these units and on the same side of the hill as the units;
- If possible, enlarge unit 8, down the hill towards the main road if possible to improve economics;
- If possible, enlarge unit 9 downhill to the lower road and try to eliminate the spur road to improve timber sale economics and lessen stream crossing impacts from the spur road;
- In all cable harvest units with clumps of reserve trees, insure that the reserve tree clumps are designed to allow safe, efficient cable yarding; e.g. design the clumps with a tear-drop shape with narrow part uphill and sides aimed at the landings for downhill logging and conversely with the narrow part downhill for uphill logging;
- In all units, insure all hazard trees can be cut as required by OSHA and safe work practices;
- In Unit 13, try to leave areas of poor quality hemlock and spruce trees for the reserve clumps;
- Drop unit 19 and the accompanying spur road or enlarge the unit for economic improvement;
- For economic improvement in unit 20, plan helicopter logging of all the volume and drop the spur road;
- Drop unit 28. This unit contains timber that is to low value to justify helicopter logging;
- Enlarge unit 30 for economic improvement but insure there are adequate anchor stumps on the revised cutting boundaries;
- Enlarge units 31, 32, 34, 43 up the hill as far as practical for cable logging. This will lower the road amortization for these units and greatly benefit the sale economics;
- Enlarge unit 39, to take advantage of the high value timber in the area;
- Design unit 45 for cable logging on the lower slopes and concentrate any needed leave trees in the higher slopes were the helicopter logging will take place;
- Enlarge unit 47 if possible;
- Enlarge unit 53 downhill if possible;
- Build a road system to access units 58, 60, 63, 64, 66, 68, 69, 70, 71, 72, 104. The road system should be constructed parallel to the beach along Bostwick Inlet all the way to Nichols Passage. The swells and wind exposure in Bostwick Inlet are far to severe to safely moor a helicopter landing barge or to deal safely with a helicopter logging water drop. The 1000 foot beach fringe will adequately screen the visual impacts of the road. The units should all be redesigned to efficiently accommodate a cable yarding system. This change will greatly improve the economics of this timber offering; and
- Consider that units 73, 74, 75, 77, 78, 79, 80, 81, 86, 88, 89, 90, 91, 92, 93, 94, 95, 96, 105, 106, 107, 108, 109 are in an area that should be developed with roads to improve the economics of this timber offering and any future timber offerings

CT-S

CT-25

CT-25

in this area. Seal Cove has been used for a helicopter landing barge site in the past but the operator reported that it was marginally safe and recommends that it not be used again. The access road can be screened from the water by leaving a 1000 foot beach fringe. Any units that can be efficiently cable logged should be designed with that intent.

AFA also offers the following general comments;

- | | |
|---|-------|
| • It should be noted that clear cutting an area improves habitat for small birds, small animals, raptors and deer; | CT-9 |
| • We urge the USFS to try to keep as many roads open as possible for recreational use; | CT-6 |
| • A close examination of Bostwick Inlet reveals that there is inadequate protection from swells and only one site, on the South West side of the inlet, has even meager protection from the wind. This is not a safe site for an LTF. Tongass Narrows appears to be the best site for an LTF for this island; | CT-19 |
| • The Sediment Risk Index analysis ignores that many streams in Southeast Alaska are nutrient poor and often benefit from small increases in sedimentation; | CT-24 |
| • Alternative mitigation measures should be allowed as a substitute for timing windows. This is necessary because the current overlapping timing windows for various fish and game species often compresses the time available for road building and timber harvest into unreasonably short periods; | CT-5 |
| • Bio-diversity and old growth reserves on Gravina Island should not be a concern. There are millions of acres of wilderness and monuments in the Tongass that provide for bio-diversity and old growth habitat. Many of these areas are near Gravina; | CT-11 |
| • The deer model that predicts 90-98% reduction in deer habitat capability does not appear to reflect actual conditions in 26 year old and older 2 nd growth stands. Deer use is typically very high in these areas and consequently there is less browse seen (the deer eat it). In addition, these stands can be commercially thinned to provide even more browse than is typical for an old-growth stand; and | CT-18 |
| • The market demand analysis described on page A-4 greatly underestimates the demand for timber sales. The mills in Southeast Alaska normally operate two shifts when adequate, economic timber supply is available. The volume required for normal operations of the manufacturing facilities is the minimum demand for timber sales. If the existing mills have a normal operating capacity of 350 mmbf/year, then that is the market demand. Measuring market demand by looking at volumes purchased or processed at a time when economic timber was scarce is not a reasonable procedure; | CT-7 |

As AFA stated in its scoping comments and as Forest Service employees have stated, the remaining available Commercial Forest Land must be carefully and intensively managed for timber production if the Forest Service is to be able to provide a supply of timber even approaching the Allowable Sale Quantity set forth in the Land Management Plan over the long term.

Appendix B

The Alaska Forest Association appreciated the opportunity to participate in the planning of the Gravina Island Timber Sale(s) project. Please contact me at (907)225-6114 if you have any questions concerning these comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "Owen Graham".

Owen Graham
Executive Director



ALASKA CENTER *for the* ENVIRONMENT

807 G Street, Suite 100 • Anchorage, Alaska 99501

907-274-3621 phone • 907-274-8733 fax • ace@akcenter.org • www.akcenter.org

June 22, 2001

Jerry Ingersoll
District/Monument Ranger
Tongass National forest
3031 Tongass Avenue
Ketchikan, AK 99901

Re: Gravina Island Timber Sale

Dear Mr. Ingersoll,

The following comments relate to the proposed Gravina Island Timber Sale on behalf of the Alaska Center for the Environment. The Center is celebrating our 30th year working to protect Alaska's natural ecosystems. Our membership utilizes the forests and waters of the Tongass and Chugach National Forest for recreation, sightseeing, subsistence, boating, hunting, wildlife viewing, backcountry opportunities, natural quiet, spiritual sustenance, and for low-impact commercial operations that include tourism enterprises, cottage industries and small-scale logging. It is recognized by our membership that local economic sustainability is directly linked to the pristine and relatively undisturbed nature of the Forest.

We are concerned about this timber sale on five major points:

1. Roadless, wilderness, 200-year rotation,
2. Subsistence and traditional use,
3. Soils, slopes, wetlands, and fish passage,
4. Cumulative impacts,
5. A flawed NEPA process.

You state in the beginning of this DEIS (1-15) that roadless area concerns are not a "significant issue." How can this be? When, in the final Roadless Policy, the Tongass was immediately included, with only certain exceptions. The Gravina timber sale never met the exceptions, making this sale is illegal under the policy. While an injunction is

CT-1



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Appendix B

now in place enjoining the implementation of the roadless rule, expedited consideration of an appeal of the decision has been granted. The Idaho court decision could be issued as early as July. The Bush administration has agreed to implement the roadless rule if the Idaho decision is reversed. However, the administration plans a revision process and no one can foresee the implications for the Gravina area timber sale.

CT-1

The Forest Service is currently under court order to prepare a supplemental EIS to evaluate all roadless areas on the Tongass for suitability as wilderness. Under this same court decision the 1999 TLMP ROD requirement to manage the Gravina Island timber LUDs on a 200-year rotation basis has been removed and rolled back to the 1997 TLMP ROD on this issue. All analysis of the impacts from logging on wildlife were based on a 200-year rotation, therefore, all data regarding impact to wildlife is inaccurate. Unless this decision is overturned on appeal, all data based on a 200-year rotation is invalid.

CT-2

CT-14

Logging would destroy existing and traditional uses of the resources of this region. Gravina is a place of traditional gathering. Subsistence plays a very significant role for residents of Metlakatla, Ketchikan, and Prince of Wales. The Metlakatla IRA, the Saxman IRA, and the Ketchikan Indian Association have all expressed concerns through the scoping process and Forest Service subsistence hearings that the traditional, cultural, and subsistence uses of the project area are threatened. A number of factors, including great distances from other food sources and a compromised position in the cash economy combine to make Native communities physically and economically dependent on traditional subsistence resources. Plant, animal, and marine resources including water quality and essential fish habitat.

CT-15

The cumulative impacts on subsistence use from other planned timber sales in the region; Cholmondeley, Slide Ridge, and Licking Creek, have not been considered. The cumulative pressure from these and other sales, Sea Level, Upper Carroll, Chasina, Moria, and Emerald Bay must be addressed in this DEIS. We request that complete analysis be made of pressure to subsistence use on Gravina from all potential and foreseeable development, both public and private.

CT-14

The lack of adequate discussion regarding future entries as it applies to all cumulative impact issues is serious and must be addressed. Other land owners can be expected to cut close to 30mmbf (DEIS page. 3-4), an amount nearly equal to the current Gravina Project's preferred alternatives, yet there is no assessment of cumulative impacts to water quality and essential fish habitat.

CT-14

The DEIS notes that the mapping of slopes for their landslide potential is ongoing (DEIS 3-83). Information on soils, slopes and watershed in this DEIS is insufficient to comment upon. The DEIS also states that "the offsite effects of soil erosion, soil displacement and landslides are not easily quantifiable and that a watershed-wide quantification of sediment and its effects on stream systems has not been complete on the Gravina Island Timber Sale area."

CT-24

In the Watershed and Fisheries section the DEIS has used methodology that gives a relative risk ranking to the various watershed in the project area. These rankings are void of any absolute assessment of risk. A watershed-wide analysis on the effects of sediment on streams has not been completed.

CT-24

Consistently we find that your DEIS is flawed and the only proper land management decision is for no action.

Cordially,



Michelle Wilson Nordhoff
Program Coordinator
Alaska Center for the Environment

Cc: Forest Chief Dale Bosworth, U.S. Forest Service

Appendix B

Jun 21 01 01:08p

AK State Office

907-276-5069

p. 1



Audubon ALASKA

308 G Street, Suite 217
Anchorage, AK 99501
Tel: 907-276-7034
Fax: 907-276-5069
www.audubon.org

June 21, 2001

Jerry Ingersoll
District Ranger
Attn: Gravina Island
U.S. Forest Service
3031 Tongass Ave.
Ketchikan, AK 99901

Dear Mr. Ingersoll,

On behalf of Audubon Alaska, I am providing these comments regarding the Gravina Island draft environmental impact statement (DEIS). Audubon Alaska is dedicated to the conservation of Alaska's natural ecosystems focusing on birds, other wildlife, and their habitats for the benefit and enjoyment of current and future generations. We are submitting this letter on behalf of over 600,000 members of the National Audubon Society and our 2,300 Alaska members and supporters. Audubon members have a special interest in the conservation of the Tongass National Forest. Many of our members have visited the forest and many Alaska members bird, hunt, fish, and generally enjoy recreating in the Tongass.

Audubon has consistently supported applying the national roadless policy to the Tongass National Forest. We do not support offering timber sales in any of the inventoried roadless areas on the Tongass. We strongly recommend adopting the No Action alternative in the Gravina Island DEIS because the Gravina Island Timber Sale would violate the Roadless Rule and would further erode forest diversity and fish and wildlife habitat values in the forest's remaining roadless areas.

CT-1

Roadless areas of the Tongass National Forest are particularly critical because past logging focused primarily on the most productive forest lands at lower elevations. These sites are relatively rare on the Tongass and are also the most important habitat for black-tailed deer, brown bear, goshawks, marbled murrelets, bald eagles, anadromous salmon, and many other species of fish and wildlife. Protecting these sites under the roadless policy will maintain their ecological integrity and conserve what is left of forest diversity on the Tongass. There is still considerable timber to be logged in sites that already have roads. Logging and road building on the Tongass, particularly in roadless areas, will further fragment this forest and reduce the value of fish and wildlife habitat. This will impact the interests Audubon members have in using the Tongass National Forest.

CT-5

CT-8

Although Gravina is the first roadless area to be faced with a timber sale under the new roadless policy, other important roadless areas deserving protection include: Three-Mile

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AK State Office

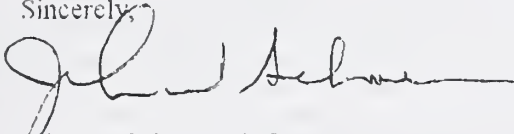
907-276-5069

p.2

on Kuju Island, Moira Sound and Cholmondeley on Prince of Wales Island, Finger Mountain on Chichagof Island, and Cape Fanshaw on the mainland coast. We strongly recommend that the Forest Service halt the Gravina sale and the other Tongass sales that are pending in inventoried roadless areas.

CT-1

Sincerely,


John W. Schoen, Ph.D.
Senior Scientist

Cc: Chief Dale N. Bosworth, U.S. Forest Service

Appendix B

Bill Rotecki
PO box 7738
Ketchikan, Ak 99901
June 26, 2001

Jerry Ingersoll
District/Monument Ranger
Ketchikan Ranger District
ATTN: Gravina Island
3031 Tongass Ave.
Ketchikan, Alaska, 99901

Re: Gravina Island DEIS

Dear Jerry:

1)
The discussion of LTF's is unsupported and inadequate. I read the Draft, as well as the resource reports used to prepare the draft, as well as the dive reports you used to prepare the draft. Some quotes (p3-33 Gravina DEIS)

"Deep bays or coastlines along straits or channels are preferred sites for log transfer facilities. These areas are preferred because deeper water is generally less productive and stronger currents disperse bark and debris that may enter the water..."

CT-19

and

"The entire coastline of the project area was analyzed for potential LTF sites. Only areas that had the necessary physical characteristics were selected for detailed investigation."

Nowhere do you discuss concrete criteria for selection. If those criteria included, as you state above, need for deep water and strong currents, Bostwick would not have shown up in the final list. I see no indication that deep water and strong currents were considered, nor do I see any comparison discussion of different LTF possibilities relative to these conditions.

Furthermore I would like to add to the record that the statement from the USF&WS from their dive report p3 paragraph 4,

"However, if constructed, surf resulting from storms out of the south may adequately oxygenate and disperse what bark may be lost during log transfer."

CT-19

is unsupportable. There is no research to support this and it goes against common sense. Log transfer does not take place during southerly storms, and the oxygenation that takes during those storms takes place principally in the upper layer of the water, it does not stir up the sediment. Additionally, the southerly winds will drive any debris in the water into the shallow area of the bay, they will not disperse the debris.

Please do not even consider placing an LTF in Bostwick Bay, even with Barge loading.

2)
The deer models should display end of rotation effects. They are the logical consequence of your proposal and should be seen somewhere. They are no where for the public to see if they are not displayed on the EIS. They are surely not in TLMP, which shows a far more modest impact to deer populations do to timber harvest. So this is the logical place to put them.

CT-18

3)
Scenic Viewshed. I think harvests should be limited to 10% of basal area.

CT-6

4)
Overall purpose and need.

The concept of multiple use needs to be revisited. We do not have multiple use now, we have "fight over turf" policy where each area is designated for a particular use, but no one area is truly multiple use. We have extreme points of view verbalizing even more extreme positions in hopes that they will get some of what they ask for. Pro-timber industry spokespeople say they want to log it all, Pro-preservationists say that they want it all locked up.

What we ought to do is try an experiment. Take some area, and Gravina would be a potential candidate, and instead of having old growth reserves and visual emphasis, and timber emphasis, each getting their own little fiefdom, try to manage for multiple uses. There is a level of harvest that is so low that it has extremely modest impacts on fish and wildlife. We ought to try harvesting at that level, on an even flow sustained yield, using a 300 year rotation basis. This most likely will have to be selective logging. But if every tree taken out was a "pumpkin", over the course of analysis it might produce a hell of a lot more \$\$ than the cut and run technique. It would also be a heck of a lot better for the economy to have a continuous low harvest than to have one big shot in the arm, and then nothing for a few decades.

CT-9

IN SUMMARY

In all honesty, I prefer the no Action alternative. That is with out a doubt my preference. I own a piece of property on Bostwick Bay and any large scale forestry activities would greatly compromise my ability to have the kind of lodge I plan to build there.

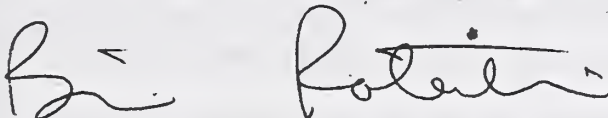
CT-12

Given the politics, if you do choose to proceed I have a number of requests. Please do not put a LTF in Bostwick. Please treat all units visible from Nichols Passage and Bostwick Bay and those visible from Clarence straits as though TLMP had designated them all Scenic viewshed. Please limit harvest in units in Scenic viewsheds to 10% basal area. Please do not compromise the productivity of deer habitat more than 10% *worst case scenario over the whole rotation*. Please eliminate all units, or portions of units that have any potential to slide. Please offer what you have designed as helicopter logging areas to small time operators and give them extended periods to operate so they have a chance to bid on them and have enough time to do unusual harvest techniques. It may be possible for someone to drop in a small mill, cut timber on site, reduce slash to small pieces so that they could be left on site, and helicopter out bundles of milled lumber. There may be other possibilities too. Any of these would keep a lot more timber dollars in Ketchikan than large-scale logging would.

CT-3 / 6 / 24

CT-7

Thank You



Bill Rotecki



C.A.R.E.

CONCERNED ALASKANS for RESOURCES and ENVIRONMENT

PO Box 9266 – Ketchikan, Alaska 99901

Phone: 907-247-9266 Fax: 907-247-9267

Email: care@ktn.net Website: <http://www.ktn.net/care>

June 25, 2001

Jerry Ingersoll
District Ranger
Attn: Gravina Island DEIS
3001 Tongass Ave.
Ketchikan, AK 99901

Dear Mr. Ingersoll:

The Concerned Alaskans for Resources and Environment (C.A.R.E.) supports the US Forest Service proposal to harvest timber from the Gravina Island Timber Sale project area. C.A.R.E. believes that the Forest Service should maximize the output of all goods and services available from the Tongass National Forest consistent with the revised Tongass Land Management Plan (TLMP). This includes maximum utilization of timber sale opportunities in areas of the Tongass that are designated Timber Production per the revised TLMP to enable manufacturing facilities in Ketchikan and elsewhere in Southeast Alaska to have the opportunity to purchase sufficient timber to meet their manufacturing needs. This also includes creating roaded recreation opportunities for the citizens of Ketchikan.

CT-7

CT-6

C.A.R.E. particularly agrees with the following points made in the DEIS: the agency should, 1) improve timber growth and productivity on suitable timber lands made available for harvest, and manage these lands for long-term sustained yield of timber; 2) contribute to a timber supply to meet market demand; 3) provide opportunities for local employment in the wood products industry, which in turn contribute to the local and regional economies of Southeast Alaska. We urge the Forest Service to maximize the offerings of economically feasible timber from the Gravina Island project area.

CT-7

C.A.R.E. supports the design and layout of timber sales that result in the opportunity for a purchaser to yield a profit. The Forest Service must offer timber sales that are economical and capable of being harvested in a profitable manner while providing the best opportunity for future intermediate treatments and harvests, which are also economically and ecologically sound. Helicopter yarding should only be used where absolutely necessary to protect and manage the resources.

CT-7

C.A.R.E. supports Alternative 4 of the Draft Environmental Impact Statement.

Alternative 4 provides the greatest opportunity for the Ketchikan Ranger District to use the Gravina Island project area to contribute to the agency goal of meeting market demand for timber under the current Tongass Land Management Plan. At the same time, Alternative 4 provides for the proper management of other resources. Even though this alternative offers the greatest number of acres of timber for harvest, it nonetheless remains a very very conservative harvest level. We support more units being harvested over time, thereby providing a greater number young stands of varying ages and greater diversity of wildlife habitat.

CT-12

CT-5

Of the 37,845 acres of forested land identified in the project area, 20,158 acres classified as productive forestland. This alternative allows for the harvest and re-grow of new trees on 2,218 acres. This represents management 11.0% of the productive forestland and 5.8% of the total forested land within the project area. The Forest Service could easily double the number of acres harvested in this entry and still satisfy the revised Forest Plan management guidelines. At such a low level of harvest, it will require about twice as many entries to attain forest plan goals and objectives on lands designated for timber production.

As planned in Alternative 4, the main road north of the Ketchikan airport leading to the middle of the island must remain open following harvest operations to provide recreational and other opportunities.

CT-6

Critics of this project have raised the issue of subsistence taking of deer as a fault of this proposal. We believe the DEIS adequately addresses subsistence use on Gravina Island. We disagree with your statement on page 3-126 (last two sentences of the Finding) and find it difficult to draw the same conclusion. "...completion of a hard-link transportation system between Ketchikan and Gravina could under Alternative 4, lead to unsustainable levels of deer harvest. Therefore, under Alternative 4, increases in access and competition for deer may result in a significant possibility of a significant restriction on subsistence use of deer." Gravina Island is predominantly old-growth in nature where the vegetation has reached a stage at which little or no new growth or diversity of habitat is being created. The habitat has likely reached the low end of its capacity to support deer populations. The no harvest policy in Old Growth Reserves, the 1000 foot beach fringe, stream buffers, and other restricted areas more than adequately provide for cover and winter habitat. The management opportunity to provide greater habitat diversity (new growth) is being ignored. Harvesting 20% of the productive forest land every 25 years would provide a continuing diversity of habitat to produce, sustain and therefore harvest more deer.

CT-15

CT-5

We realize that providing more deer to harvest and causing the Alaska Department of Fish and Game to actually use seasons, bag limits, and science to manage game like other states will be a challenge to them. Simply denying access is the easy management solution.

On pages 3-95 a discussion of habitat fragmentation and corridors assumes there is a problem and a solution. At the S.A.F. National Convention (Portland -Sept. 1999), one of the technical sessions presented a summary of a 1998 conference titled "Forest Fragmentation, Wildlife and Management Implications". To quote from the conference summary by James A. Rochelle, page 3, "the information presented provided little evidence of negative effects on vertebrate biodiversity from fragmentation in western forests"; page 4, "There is also little evidence that lack of connectivity poses a threat to most vertebrate species in western forests". Other studies

CT-5

Appendix B

noted little use of corridors. C.A.R.E. supports the application of only creditable science, which is applicable to the local forest situation.

I thank you on behalf the nearly 400 members of C.A.R.E. for the opportunity to comment on the proposed project, we look forward to seeing the concept of multiple-use returning to the management of the Tongass National Forest.

Sincerely,

A handwritten signature in cursive script that reads "Dick Coose".

Dick Coose
Executive Director

June 25, 2001

Jerry Ingersoll
 District Ranger
 Attn: Gravina Island DEIS
 3001 Tongass Ave.
 Ketchikan, AK 99901

Dear Jerry:

I support the US Forest Service proposal to harvest timber from the Gravina Island Timber Sale project area. The Forest Service should maximize the output of all goods and services available from the Tongass National Forest consistent with the revised Tongass Land Management Plan (TLMP). This includes maximum utilization of timber sale opportunities in areas of the Tongass that are designated Timber Production per the revised TLMP to enable manufacturing facilities in Ketchikan and elsewhere in Southeast Alaska to have the opportunity to purchase sufficient timber to meet their manufacturing needs. This also includes creating roaded recreation opportunities for the citizens of Ketchikan.

CT-7

CT-6

I support the design and layout of timber sales that result in the opportunity for a purchaser to yield a profit. The Forest Service must offer timber sales that are economical and capable of being harvested in a profitable manner while providing the best opportunity for future intermediate treatments and harvests. Helicopter yarding should only be used where absolutely necessary to protect and manage the resources.

CT-7

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CT-12

CT-5

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CT-7

The main road north of the Ketchikan airport leading to the middle of the island must remain open following harvest operations to provide recreational and other opportunities.

CT-6

The against anything and everything critics of this project have raised the issue of subsistence taking of deer as a fault of this proposal. I believe the DEIS adequately

Appendix B

addresses subsistence use on Gravina Island. I disagree with your statement on page 3-126 (last two sentences of the Finding) and find it difficult to draw the same conclusion. "...completion of a hard-link transportation system between Ketchikan and Gravina could under Alternative 4, lead to unsustainable levels of deer harvest. Therefore, under Alternative 4, increases in access and competition for deer may result in a significant possibility of a significant restriction on subsistence use of deer." Gravina Island is predominantly old-growth in nature where the vegetation has reached a stage at which little or no new growth or diversity of habitat is being created. The habitat has likely reached the low end of its capacity to support deer populations. The no harvest policy in Old Growth Reserves, the 1000 foot beach fringe, stream buffers, and other restricted areas more than adequately provide for cover and winter habitat. The management opportunity to provide greater habitat diversity (new growth) is being ignored. Harvesting 20% of the productive forest land every 25 years would provide a continuing diversity of habitat to produce, sustain and therefore harvest more deer.

CT-15

CT-5

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CT-5

I am very disturbed to hear that the Forest Service seems to think that the number of public comments for or against the project could have an effect on your decision. Just because the anti-anything and everything group submit a pile of NO letters to the project, does not mean the other side should need to submit a bigger pile of yes letters. The Forest Service decision maker has no law supporting National Forest land management by poll or popular vote. National Forest land management decisions are to be made by responsible Forest Service professionals using credible science, professional experience, local knowledge, and local input to implement approved forest land management plans. Lets put an end to this perception that the biggest pile of letters wins.

CT-22

Thank you for the opportunity to comment on the proposed project. I look forward to seeing the concept of multiple-use returning to the management of the Tongass National Forest.

Sincerely,


Richard L. Coose



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
1689 C. Street, Room 119
Anchorage, Alaska 99501-5126

ER 01/46

June 25, 2001

Jeremiah Ingersoll
District Ranger
Ketchikan Ranger District
Tongass National Forest
3031 Tongass Avenue
Ketchikan, Alaska 99901

Dear Mr. Ingersoll:

The Department of the Interior has reviewed the January 2001 Draft Environmental Impact Statement (EIS) for the Gravina Island Timber Sale proposed on Gravina Island, near Ketchikan, Alaska. As you know, the U.S. Forest Service (USFS) proposes, through several timber sales, to harvest 37 million board feet of timber and to build 22.6 miles of road on 2,218 acres of National Forest land. The USFS also proposes to leave 16 miles of newly constructed road open for recreational purposes after timber harvest.

We request that the following comments be addressed in the Final EIS for the proposed Gravina Island Timber Sale.

GENERAL COMMENTS

We believe there are several confusing issues associated with the proposed Gravina Island timber sale. For example, the Tongass Land Management Plan (TLMP) Final EIS states that under Alternative 11, the selected alternative "... Gravina Island would be maintained in the current condition ..." (p. 3-642). Therefore, this proposed timber sale does not appear to be consistent with the 1997 TLMP. It is important that this apparent disparity be explained in the Final EIS.

CT-22

We also believe that the effect of the USFS Roadless Areas Conservation Rule (Roadless Rule) on this proposed timber sale needs to be explained in the Final EIS. As you know, the Roadless Rule, which was signed January 5, 2001, and published in the *Federal Register* on January 12, 2001, banned road construction, reconstruction, or the cutting, sale, or removal of timber in inventoried roadless areas on the Tongass National Forest unless a notice of availability of a draft EIS for such activities was published in the *Federal Register* prior to January 12, 2001. A notice of availability for the Draft EIS for the proposed Gravina Timber Sale was published in the *Federal Register* on January 19, 2001. Because the notice of availability for the Gravina Timber Sale was published after January 12, 2001, road construction and timber harvest would not be allowed. However, as you

CT-1

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know, implementation of this rule has been delayed, and the rule is presently the subject of several lawsuits.

Additionally, it is our understanding that the USFS is under a court order to analyze an additional TLMP alternative that may result in the USFS recommending additional Wilderness Area designations on the Tongass National Forest. Because we believe that Forest System lands on Gravina Island are likely to meet the criteria for Wilderness Area designation, we believe it would be premature to offer a timber sale with associated new road construction that precludes this area from such a designation, prior to the completion of the required analysis in the revised TLMP.

CT-2

ROAD MANAGEMENT

Alternative 4 (the proposed action and preferred alternative) proposes maximum timber harvest and road building in an inventoried roadless area. These actions would reduce the Gravina Island Roadless Area by 16,946 acres or 45 percent (Draft EIS, Chapter 3, 3-66). Construction and use of logging roads substantially alter the character of an area and degrade its value as fish and wildlife habitat. Many of the impacts to fish and wildlife that result from timber harvest programs are directly related to construction and use of roads and stream crossing structures.

The list of impacts to fish, wildlife, and plant resources attributable to road construction and use includes the following:

- Road construction kills sessile and slow-moving organisms; injures organisms adjacent to a road; and alters physical conditions beneath a road.
- Roads alter deer, black bear, and wolf behavior by causing changes in home ranges, movement, reproductive success, escape response, and physiological state.
- Roads change soil density, temperature, soil water content, light levels, dust, surface waters, patterns of runoff, and sedimentation, as well as adding heavy metals, salts, organic molecules, ozone, and nutrients to roadside environments.
- Roads promote the dispersal of exotic species by altering habitats, stressing native species, and providing movement corridors.
- Roads promote increased hunting, fishing, passive harassment of deer, bear, wolf, and other species, and landscape modifications.

Overall, the presence of roads is highly correlated with changes in species composition, population sizes, and hydrologic and geomorphic processes that shape aquatic and riparian systems (Trombulak and Frissell, 2000).

The list of positive values or features that characterize inventoried roadless areas is summarized in the Roadless Areas (USFS 2001). These values and features include:

- High quality or undisturbed soil, water and air;
- Sources of public drinking water;
- Diversity of plant and animal communities;
- Habitat for sensitive species and for species dependent on large, undisturbed areas of land;
- Primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation;
- Reference landscapes;
- Natural appearing landscapes with high scenic quality;
- Traditional cultural properties and sacred sites; and
- Other locally identified unique characteristics.

The Roadless Rule also outlines fiscally-related environmental concerns about building new roads in inventoried roadless areas when there is presently a backlog of about \$8.4 billion in deferred maintenance and reconstruction on the more than 386,000 miles of roads in the Forest Transportation System. (The USFS estimates that at least 60,000 miles of additional unauthorized roads exist across National Forest System lands.) According to the Roadless Rule, the USFS receives less than 20 percent of the funds needed annually to maintain existing road infrastructure. The Roadless Rule states:

“As funding needs remain unmet, the cost of fixing deteriorating roads increases exponentially every year. Failure to maintain existing roads can also lead to erosion and water quality degradation and other environmental problems and potential threats to human safety. It makes little fiscal sense to build additional roads in inventoried roadless areas that have irretrievable values at risk when the agency is struggling to maintain its existing extensive road system. The risks inherent in building new roads in presently roadless areas threaten environmental, social, and economic values” (USFS 2001).

We are concerned about the environmental impacts of Tongass National Forest roads that are not properly maintained. Regardless of when and how the Roadless Rule is ultimately implemented, we agree that maintenance or proper retirement of existing roads should take priority over new road construction in roadless areas. We request that the Final EIS explain the status of road maintenance needs elsewhere on the Ketchikan Ranger District and the Tongass National Forest and how this could affect plans for funding and implementing long-term maintenance or retirement of any roads proposed for the Gravina Island Timber Sale.

CT-16

LOG TRANSFER FACILITIES

The U.S. Fish and Wildlife Service (FWS), in cooperation with USFS and Alaska Department of Fish and Game (ADFG) representatives, conducted on June 9, 2000, an underwater biological investigation of the proposed Bostwick Inlet log transfer facility (LTF). These investigations were

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described in a report of that date, submitted to the USFS on October 6, 2000 (FWS 2000). The report concluded:

“The proposed project, as designed, would likely have negative effects on existing marine plant and animal species in the Bostwick Inlet area. A barge style LTF would minimize some of the concerns related to bark loss during log transfer; however, since the site is shallow, a large intertidal fill would be necessary to reach deep enough water for barges to operate. We recommend that other alternatives, such as helicoptering logs to barges, or transporting logs to a facility along Tongass Narrows in Ketchikan, be explored to minimize impacts to fish and wildlife resources in, and subsistence and recreational user groups that frequent, Bostwick Inlet.”

CT-19

This report generally concurs with USFS findings, which support utilizing the existing LTF in Tongass Narrows, if a roaded option is selected for this sale. We recommend that the FWS report be cited and the results included in the Final EIS.

ALEXANDER ARCHIPELAGO WOLF

In August 1997, the FWS found that listing the Alexander Archipelago wolf as a threatened species under the Endangered Species Act (ESA) was not warranted at that time. This decision was based in large part upon full implementation of the 1997 TLMP by the USFS. The TLMP identified maintenance of adequate deer habitat capability and the control of road density and human access as key factors important for maintaining viable, well-distributed wolf populations (TLMP 3-356).

Among the alternatives considered in the Draft EIS, the proposed and preferred alternative for the proposed Gravina Island timber sale (Alternative 4) would cause the greatest reduction in deer habitat capability (Draft EIS, Chapter 2, 2-17). It would also provide the greatest increase in access to currently inaccessible areas and would result in the greatest increase in harvest of deer in Wildlife Analysis Area 101 (Draft EIS, Chapter 3, 3-112). Alternative 4 is the only alternative that would provide long-term roaded access on Gravina Island; i.e., the construction of 22.6 miles of new road, of which approximately 16 miles would remain open after the sale (Draft EIS, Chapter 2, 2-17). Given current deer harvest regulations and bag limits, completion of a hard link transportation system between Ketchikan and Gravina, coupled with future restrictions on Ketchikan hunters from harvesting deer on Prince of Wales Island, we believe the increased access provided by Alternative 4 could lead to unsustainable deer harvests on Gravina Island (Draft EIS, Chapter 3, 3-112).

The Draft EIS assumes there is only one wolf pack on Gravina Island (Draft EIS, Chapter 3, 3-114). Wolf studies on the Tongass suggest that pack sizes vary between 5 and 9 individuals (Person et al. 1996). While the size of the Gravina Island pack is unknown, harvest records suggest that in some years, hunters and trappers may harvest most of the pack (Draft EIS, Chapter 3, 3-118). Alternatives 2, 3, and 4 propose building a road near a wolf den that was known to be active in 1998 and 1999, but was inactive in 2000 (although there was a great deal of wolf sign around the den site). The TLMP Standards and Guidelines require maintenance of a 1,200-foot buffer, where available, around

known active wolf dens. Road construction within the buffer is discouraged and not allowed within 600 feet unless a site-specific evaluation indicates that landform or other factors will alleviate potential adverse disturbance (TLMP 4-114). According to the Draft EIS, alternate road locations that would have maintained the recommended 1,200-foot buffer were explored and found to be impractical (Draft EIS, Chapter 3, 3-117). We request that the Final EIS include a description of the alternate road locations that were identified and an explanation of why they were found to be impractical.

CT-17

As described in the Draft EIS, a road system on Gravina Island would probably result in increased harvest of wolves and, therefore, a higher likelihood that in any given year the entire pack could be harvested (Chapter 3, 3-118). This likelihood would be greatest under Alternative 4, followed in order of decreasing impact by Alternatives 3, 2, 5, and 1 (Draft EIS, Chapter 3, 3-118). Although road densities and deer habitat capabilities on Gravina Island are projected to remain at levels thought adequate to maintain wolf populations elsewhere on the Tongass, the likelihood of extirpation of wolves on Gravina Island is significantly increased by the location of roads and timber harvest that will encroach on the only known den, and increased human access that will lead to increased harvest of deer and wolves.

CT-17

The USFS states that: "Loss of the Gravina wolf pack would not likely threaten the viability or the distribution of the species forest-wide" (Draft EIS, Chapter 3, 3-117). This rationale appears contradictory to the direction given in the TLMP Wildlife Standards and Guidelines. Page 4-110 of the TLMP, Part IIB states, "Provide the abundance and distribution of habitat necessary to maintain viable populations of existing native and desirable introduced species well-distributed in the planning area." Part XVII, A3 states, "Where distinct taxa are located, design projects to provide for their long-term persistence on the island." We believe it is important that the proposed timber sale does not result in the extirpation of an economically important furbearer and big game species from Gravina Island, especially an endemic form found only on and adjacent to the Tongass National Forest. Therefore, we recommend against construction of any roads for this project, which would violate the recommended 1,200-foot buffer. We believe selection of either Alternative 5 (helicopter harvest) or Alternative 1 (no action), or portions of these alternatives in the vicinity of the wolf den, could help maintain the viability and distribution of wolves on Gravina Island, protect the only known den on the island, and maintain habitat capability for deer, their primary prey. If a roaded option is selected, we recommend a complete, physical road closure after timber harvest, for all roads that would access this and other important wildlife habitats.

CT-16

QUEEN CHARLOTTE GOSHAWK

As with the wolf, the FWS recently found that listing the Queen Charlotte goshawk under the ESA was not warranted, based on implementation of the 1997 TLMP. Conversion of productive old growth stands to second growth impacts goshawks by (1) removing nesting habitat, (2) creating stands through which the birds cannot fly, and (3) reducing prey habitat and availability. Protection of old growth blocks and protection of known goshawk nesting areas are important strategies for maintaining this species.

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The Draft EIS indicates that while five positive goshawk sightings were reported in Value Comparison Unit (VCU) 7620, near Phocena Bay, a nest has not yet been discovered (Draft EIS, Chapter 3, 3-103). Some of the observations indicated that the goshawks sighted were exhibiting nesting behavior. Because it is likely that a nest does exist within this VCU, we believe timber harvest in this VCU should be deferred until the nest is located so appropriate buffers and conservation measures can be applied in a manner that will maintain important goshawk habitat.

CT-5

The Draft EIS states that “Alternatives 2, 3, 4, and 5 propose timber harvest in 295, 266, 441, and 167 acres of potentially high value goshawk habitat, respectively” (Draft EIS, Chapter 3, 3-103). We recommend Alternative 5 (helicopter harvest) or Alternative 1 (no action) be selected for this project to minimize impacts to important goshawk habitat. Alternative 5, as compared to the USFS preferred Alternative 4, would reduce potential impacts. Alternative 1 would eliminate potential impacts to the Queen Charlotte Goshawk.

CT-5

AMERICAN MARTEN

Marten (*Martes americana*) are widespread in the Tongass National Forest, and are an important furbearer. Marten are easily trapped, and thus, are quite vulnerable to over-harvest, which correlates closely with the availability of road access (Draft EIS, Chapter 3, 3-120). Because of their susceptibility to trapping, declines in marten densities have been observed at road densities as low as 0.2 miles per square mile, and population declines of 90 percent have been observed where road densities approach 0.6 miles per square mile (Draft EIS, Chapter 3, 3-120). Alternatives 2, 3, and 4 propose construction of approximately 20 to 23 miles of new roads, resulting in road densities between 0.3 and 0.4 miles per square mile.

In Alternative 4, roads would remain open after timber harvest to provide increased roaded access, which would provide access to the greatest number of harvestable acres. Alternative 4 would pose the greatest potential impact on marten habitat, followed by Alternatives 3 and 2 (Draft EIS, Chapter 3, 3-120 and 3-121).

The Gravina Island project area is part of the Revillagigedo Island/Cleveland Peninsula biogeographical province, which is considered a high-risk province for marten habitat (Draft EIS, Chapter 3, 3-118). Although TLMP timber harvest standards and guidelines for such areas may minimize impacts to marten habitat, we are concerned that Alternative 4 may lead to over-harvest of this species in the project area, possibly resulting in regulatory restrictions that will reduce sustainable marten harvest opportunities.

CT-5

We recommend that Alternative 5 (helicopter harvest) or Alternative 1 (no action) be selected for this project to maintain the viability and distribution of marten on Gravina Island. If a roaded option is selected, we recommend a complete, physical road closure be implemented after timber harvest.

CT-5

FISHERIES

Many experts have recommended that the USFS reduce road construction on the Tongass National Forest. Several expert panels have considered the effects of forest management on fish and aquatic resources on the Tongass National Forest and have concluded that roads have caused significant impacts. For example, the Fish Habitat Analysis Team (FHAT) recommended that timber harvest and road building activities on potentially unstable slopes be reduced or eliminated; greater care be taken in road construction techniques; and road maintenance and road closures be increased (FHAT 1994; TLMP, p. 3-55). The Anadromous Fish Habitat Assessment, which reviewed many independent sources of information relevant to fish habitat on the Tongass (including the FHAT report), concluded that “current procedures and their implementation on the Tongass National Forest to protect fish habitat are not fully effective to prevent habitat degradation or fully protect salmon and steelhead stocks over the long term” (TLMP, p. 10). A panel focusing on fish and riparian issues for the TLMP revision considered sediment from roads the most likely cause of detrimental effects to salmon and concluded that as road miles increased, greater impacts to fish habitats, fish populations, and riparian conditions would occur with greater likelihood that TLMP goals for these resources would not be met (TLMP, p. 3-59 to 3-61). Recent surveys conducted by ADFG indicate that on the Tongass National Forest more than 50 percent of existing system road crossings over resident or anadromous fish-bearing streams block fish passage and eliminate upstream habitat from use.

Of the action alternatives, Alternative 4 has the potential for the greatest effect on fish habitat by construction of 34 stream crossings on National Forest System land (Chapter 2, 2-18). Alternative 5 would have the least impact on fish and water resources of the four action alternatives (Chapter 3, 3-49).

We recommend that Alternative 5 (helicopter harvest) or Alternative 1 (no action) be selected for this project to maintain the integrity of fish habitat and water quality. If a roaded option is selected, we recommend a complete, physical road closure after timber harvest that includes the removal of culverts and seeding of the road bed to stabilize erodable surfaces.

CT-5

SUBSISTENCE

Gravina Island is an important subsistence and sport hunting area for the communities of Ketchikan, Saxman, and Metlakatla. The Draft EIS relates that, combined with reasonably foreseeable actions on non-National Forest System lands, the cumulative impacts of timber harvest on deer abundance and distribution on Gravina Island (Wildlife Analysis Area [WAA] 101) as a whole will be greatest under Alternative 4, followed, in order of decreasing impact, by Alternatives 3, 2, 5, and 1 (Chapter 3, 3-125). Alternative 4 would have the greatest impact because roads would remain open after timber harvest was completed (Draft EIS, Chapter 3, 3-125).

We are unaware of a USFS project proposed that has drawn such a high degree of attention from subsistence-dependent communities as the Gravina Island Timber Sale project. Metlakatla reported that WAA 101 was among those WAAs representing 75 percent of the community’s average annual

Appendix B

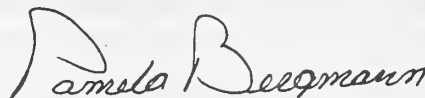
reported deer harvest. The Draft EIS states: "Alternative 4 could result in a significant possibility of a significant restriction on the subsistence harvest of deer" (Chapter 3, 3-126).

Alternative 4 does not appear to be responsive to the expressed concerns of local subsistence-dependent residents, considering that the other alternatives are less likely to create significant impacts to subsistence users. Alternative 5 (helicopter harvest) or 1 (no action) would better address these subsistence concerns, and maintain the integrity of fish and wildlife habitats in the proposed project area. If a roaded option is selected, we recommend complete, physical road closure after timber harvest. CT-15
CT-12
CT-16

In summary, we believe there are alternatives evaluated in the Draft EIS that would respond to the need for wood fiber while resulting in less impact on the roadless character of Gravina Island. For example, Alternative 5 (helicopter harvest) would have comparatively short-term impacts on the area, and roadless acres would remain the same as the existing condition. Of the action alternatives, Alternative 5 appears to best provide for multiple-use objectives while protecting the roadless character of the project area. Therefore, we recommend selecting either Alternative 1 (No Action), or Alternative 5 (helicopter harvest) for this project to maintain management options for the future, and to conserve the many significant fish and wildlife resources of Gravina Island. CT-12

We appreciate the opportunity for the FWS biologists to work with the planning team over the past several years. We would like to ensure that the dialogue with you and your staff on this project continues and that FWS representatives be included in upcoming meetings or field work to evaluate any of the issues contained in this letter. If you have any questions, please contact Ed Grossman, FWS, at 907-586-7069.

Sincerely,



Pamela Bergmann
Regional Environmental Officer - Alaska

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Appendix B

June 19, 2001

Eric Muench
228 Martin Street
Ketchikan, Alaska 99901
phn (907) 225-5372

Mr. Jerry Ingersoll, District Ranger
Ketchikan Ranger District
3031 Tongass Avenue
Ketchikan, Alaska 99901

Attention: Gravina Island DEIS

Dear Mr. Ingersoll,

I support a timber entry program on Gravina Island. As Revilla Island is Ketchikan's back yard, Gravina Island is its front yard, and decisions made for Gravina should reflect the wishes and welfare of the local people to a much greater degree than the wishes of people of other areas. A large portion of the Island is private, Borough, Mental Health Trust, and State owned, and will be developed for the benefit of those owners. The national forest portion should be developed in concert with and to complement development in the non-federal portion.

CT-23

Enough total timber over a reasonable time period should be available so that each offering from whatever owner will be realistically biddable to Gravina Island mills as well as to purchasers throughout the region. That will ensure that bids will be truly competitive and returns to the federal treasury will be fair. That means cooperating with eventual or ongoing timber development plans of other owners to make a long-term log processing yard and LTF on Tongass Narrows into a promising enterprise. It also means designing the overall entry as well as individual federal timber sales to be economical. Layout should use applicable "conventional" (road access and ground or cable yarding) systems in preference to more expensive helicopter logging. Helicopter logging should be restricted to areas not otherwise economically accessible or areas of unusual sensitivity to ground disturbance. Future silvicultural management will be more economically feasible and more likely with road access. Alternative 4 provides the best opportunity to achieve these ends.

CT-7

CT-23

CT-7

CT-12

Roaded recreation should also be enhanced by recognizing sites of outstanding value for trails, camping, fishing, etc., and by providing permanent access to their vicinity while ~~preserving the immediate natural surroundings~~. Hunting access should be provided by maintaining a permanently open main road from the Tongass Narrows area into the island interior. Due primarily to topography and weather patterns, Gravina has always had a relatively good overwinter deer survival and deer numbers. Historically, timber development in southern Southeast has resulted in increased deer harvests while maintaining or increasing deer numbers. If greater hunter opportunities ever results in too much hunting pressure, then the problem should be managed by Alaska Fish and Game season and bag limitations rather than by closing off public access.

CT-6

CT-20

Thank you for the opportunity to comment.

Sincerely,


Eric Muench



FOREST CONSERVATION COUNCIL

Jeremiah C. Ingersoll
 Ketchikan-Misty Fiords Ranger District
 Tongass National Forest
 Attn: Gravina Island EIS
 3031 Tongass Ave.
 Ketchikan, AK 99901

Tuesday, June 26, 2001

Sent by e-mail and U.S. Postal

Service

RE: FCC and NFPA Comments on the Gravina Timber Sale Draft DEIS

Dear Mr. Ingersoll,

Forest Conservation Council and the National Forest Protection Alliance are tax-exempt, public interest organizations with individual and business members throughout the United States. We have participated in the planning and management of the Tongass National Forest regularly since 1998.

Please note our initial comment letter of April 13, 2000. The following comments are meant to supplement that official expression of interest and description of concerns.

The Gravina Timber Sale is especially egregious and ill-conceived at this very contentious time for National Forest Management. At particular issue is the roadless nature of Gravina Island and the unprecedented call by the American people to have roadless areas on their National Forests permanently protected. This is a significant issue especially in regard to the Gravina Timber Sale, but the D.E.I.S. dismisses the issue as non-significant! Not only must the Forest Service analyze this as a significant issue it should defer timber harvest entirely on Gravina Island until the court ordered review of potential wilderness lands is completed and the true value of Gravina's roadless areas can be evaluated. Until such an evaluation is completed the Forest Service cannot possibly meet its legal requirements to weigh all of the costs and benefits of its proposed actions.

CT-1

It has been estimated that the U.S. taxpayer must subsidize each direct job generated by the Tongass timber program, in both roaded and un-roaded sales, by approximately \$35,000 to \$46,000. (RAC FEIS and JGSC). This is simply unacceptable that such a welfare program be conducted on public lands. Americans should not have pay to have their invaluable old growth cut down in roadless areas.

CT-7

Western Regional Office
 P.O. Box 22488
 Santa Fe, New Mexico 87502
 (505) 986-1163

Southeastern Regional Office
 P.O. Box 276268
 Boca Raton, Florida 33427
 (561) 347-0949

Mid-Atlantic Regional Office
 3526 Firey Run Road
 Linden, Virginia 22642
 (540) 364-9651

This is just one of the adverse economic effects of the national forest logging program, and the Forest Service's failure to quantify such effects at the project level or for the program as a whole. The logging program increases costs of water purification and filtration, decreases the value of private timberlands, unfairly competes against alternative fiber and building material businesses, increases blowdown risk, increases repair and maintenance costs for highways and public roads, and decreases the number of jobs in recreation, tourism, fisheries, and alternative forest products. The issues are especially pertinent in the context of the Gravina Timber Sale and its potential to severely degrade and impact roadless area values.

CT-7

Further, the Gravina Timber Sale will jeopardize the viability of species that thrive in naturally disturbed forests, intervene in natural disturbance processes that are vital to ecosystem sustainability, and degrade water quality and watershed condition. The analysis on which the Forest has relied is inadequate, flawed and biased in a number of ways, rendering any potential decision arbitrary and capricious. It is not clear from the E.I.S. whether or not the Gravina Island timber Sale is in compliance with the TLMP 200-year rotation schedule. The entire E.I.S. and its environmental consequences section are predicated unconditionally on the TLMP and its various provisions. Any management of LUDs other than the 200-year rotation would require an entirely revised E.I.S.

CT-11

CT-14

Our general concerns with the Gravina Timber Sale E.I.S. include:

1. Socioeconomic Benefits

USFS timber sales are the end result of inter-related planning decisions and analyses made at the national, forest, and project level. 36 C.F.R. § 219.4. At the national level, the Forest Service prepares the Renewable Resources Program (RPA), which determines output levels for all national forest resources based upon a comprehensive environmental and economic assessment of present and anticipated demands for and supply of renewable resources from forests in all ownership. At the forest level, the Forest Service has prepared the Tongass National Forest Land and Resource Management Plan ("LRMP"), which is an "extension" of the RPA Program and which identifies lands that are suitable for timber sales, the amount of timber to be offered each year, and under what conditions timber sales will be offered. At the project level, the Forest Service makes decisions about the specific configuration of individual timber sales, including the Gravina Timber Sale. At each level, the Forest Service must engage in environmental and economic analyses of its decisions as required by the National Environmental Policy Act.

The Forest Service is required by law to manage national forest system lands and programs to maximize social and economic benefits for the American people. As with other projects planned on the National Forests of Alaska and throughout Region 10, the Forest Service has failed to complete an economic analysis of the Gravina Timber Sale that provides the public with a full and fair accounting of net economic benefits.

CT-7

FCC/NFPA 45-Day Comments,
Gravina Timber Sale, p. 2

Instead, the economic analysis is limited to net costs incurred by the Forest Service and project administrators for county receipts as well as sale preparation and administration costs.

The draft E.I.S. and project record fail to place any economic value on existing uses and functions of the sale area, including recreation, flood control, pest control, carbon sequestering, and many other "ecosystem services." In addition, the economic analysis fails to consider a wide range of costs that will be incurred by the public through loss of these "ecosystem services" and other externalized costs such as increased flooding, increased risk of death, injury, and property damage from logging operations.

CT-7

Forest Conservation Council has raised these economic issues in the context of numerous appeals in Region 10. We incorporate, by reference, these appeals for a more complete description of our issues on this subject.

2. Value of Unlogged Forest

The dollar value of unlogged forest or standing, dead and down timber should have been calculated and used in the analysis of economic costs associated with the Gravina Timber Sale. The value of "ecosystem services" provided by standing forests has never been evaluated and compared with their value as lumber. Economic benefits of standing forests include but are not limited to clean air and water, balance of global geochemical cycles, and buffering of carbon emissions resulting from the burning of fossil fuels. It has been shown that the rate of carbon lost to that of accumulation is much greater during harvest, and there is a net transfer of carbon from biomass to atmospheric CO₂. Further, the carbon stored in forest regrowth is less than that in the original forest biomass.

CT-8

3. Species Viability

The Gravina Timber Sale includes commercial harvest, ground-disturbing activities associated with timber harvest and other vegetative manipulation. These activities are likely to jeopardize the viability of species that find optimal habitat in forests with well-developed structures, and forests naturally disturbed by blowdown, as well as disease and insect pathogens. These include threatened, endangered, and sensitive species, as well as management indicator species such as Queen Charlotte goshawk, Sitka black-tailed deer, marten, black bear, and Alexander Archipelago Wolf.

CT-11

For many of these species the Forest Service has no up-to-date population data describing population numbers, locations, and trends, nor monitoring data on which the agency can rely to determine that the actions proposed in the context of the Gravina Timber Sale will maintain numbers and distribution of these species sufficient for insuring long term viability.

FCC/NFPA 45-Day Comments,
Gravina Timber Sale, p. 3

Appendix B

Equally important, the Forest Service has not determined the “**minimum number**” of reproductive individuals that would constitute a viable population. The Forest Service is required by law to determine this minimum number of reproductive individuals before implementing activities that might impact those individuals or populations such as are planned in Gravina Timber Sale.

CT-11

Because the Forest Service has no such data for most species adversely affected by the proposed management activities, and because what data there is suggests that such species are declining and otherwise at risk, the Forest Service runs afoul of viability and diversity requirements set forth in forest planning regulations 36 C.F.R. § 219.19 and § 219.26.

CT-11

4. Cumulative Effects

The USDA Office of Inspector General has identified cumulative effects analysis as an area of concern for the Forest Service in particular and this is a significant issue. (USDA Office of Inspector General Evaluation Report. 1999. No. 08801-10-At)

The Forest Service Environmental Policy and Procedures Handbook sets the standard for analysis of cumulative effects:

"Individual actions when considered alone may not have a significant impact on the quality of the human environment. Groups of actions, when added together, may have collective or cumulative impacts which are significant. Cumulative effects which occur must be considered and analyzed without regard to land ownership boundaries. Consideration must be given to the incremental effects of past, present, and reasonably foreseeable related future actions of the Forest Service, as well as those of other agencies and individuals."

CT-14

Despite this clear direction, the Gravina Timber Sale draft E.I.S. avoids the required analysis and ignores important contributors to cumulative effects. Cumulative impacts are analyzed in context only of timber harvest, no attention is provided to other factors such as increased passenger vehicle and OHV use as well as the impact from the Hard Link development project.

5. The Forest Service Failed To Use Qualified Experts To Prepare The Economic Analysis Contained in the Gravina Timber Sale E.I.S.

By law, the Forest Service must use a qualified, interdisciplinary team to prepare environmental impact statements. "The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process."¹ "Also, the team must have the

CT-7

¹ 40 C.F.R. 1502.6.

expertise to identify and to evaluate the potential direct, indirect, and cumulative social, economic, physical, and biological effects of the proposed action and its alternatives.”²

6. By Contributing To A Vast Global Waste Of Wood Products, The Forest Service Has Failed To Meet Substantive Obligations To Conserve Forests And Promote Use Of Recycled Materials.

In preparing individual timber sales, and the timber sale program as a whole, the Forest Service must also be conscious of its role as a “catalyst” for promoting conservation of forests and use of recycled materials, and not plan individual timber sales or the timber sale program as a whole in a manner that promotes use of virgin materials over recycled products.

The RPA states clearly that: “recycled timber product materials are as much a part of our renewable forest resources as are the trees from which they originally came, and in order to extend our timber and timber fiber resources and reduce pressures for timber production from Federal lands, the Forest Service should expand its research in the use of recycled and waste timber product materials, develop techniques for the substitution of these secondary materials for primary materials, and promote and encourage the use of recycled timber product materials.”³

This issue is not simply one of “finding a uses for undervalued tree species,” material use efficiency, “noncommercial wood,” or “value added products.” This issue concerns the indiscriminant and subsidized waste of federal public forests as well as the failure to promote non-timber and recycled products.

Timber production from federal lands, especially when that production is subsidized, and especially when timber supplies are abundant, creates “displacement” costs for producers of recycled and non-wood fiber and building materials by depressing prices such products can command on the open market. These displacement costs have not been considered at all in the Gravina Timber Sale E.I.S., but are likely significant when the cumulative effects of the Tongass National Forest timber sale program and the national forest logging program, as a whole, are considered. By contributing to a tremendous glut of timber in the regional market, the Forest Service runs afoul of the RPA’s clear language by failing to “promote and encourage use of recycled timber product materials.” As long as abundant supplies of heavily subsidized timber are available, these products will never attain a significant market share.

7. Response to Comments: The USFS is avoiding significant issues raised in FCC/NFPA’s comments letter of April 13, 2000.

² FSH 1909.15.12.01, 12.1

³ 16 U.S.C. 1600 (7)

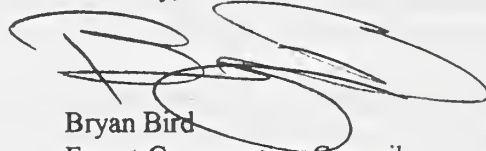
Appendix B

NEPA implementing regulations at §1503.4 require all federal agencies to respond in writing to public comments submitted on a given project. This requirement forces agencies to consider public sentiment and knowledge with respect to the proposed action, and to respond to such comments or, if necessary, develop new alternatives or modify the proposed actions. The Tongass National Forest has failed to respond to many of the comments during scoping, and failed to respond directly to any comments on the E.I.S. Instead, the new E.I.S. simply ignores important issues and comments raised by the public. But of course, the Forest Service needs to respond to scoping comments and initial comments on the E.I.S. Substantive comments which were raised in scoping or on the E.I.S. which were not responded to include:

- Cumulative effects, in particular, the USFS' role in the Hard Link development project. | CT-14
- Failure to perform an accurate and fair socioeconomic analysis. | CT-7
- Failure to develop an adequate range of alternatives. | CT-21
- Unique resources, in particular, karst, muskeg, and marine ecosystems. | CT-19 / 24

Please address these issues in your final environmental impact statement. Thank you for your time and consideration. **Please also note that all further NEPA communications should be mailed to our Western Regional Office in Santa Fe, NM.**

Sincerely,



Bryan Bird
Forest Conservation Council,
Western Regional Office
Member of the Board,
National Forest protection Alliance

FCC/NFPA 45-Day Comments,
Gravina Timber Sale, p. 6

June 17, 2001

Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Ave.
Ketchikan, AK 99901

Dear Ranger Ingersoll,

Thank you very much for the opportunity to comment on this project of the US Forest Service. I wish to submit my comments on the DEIS for the Gravina Island timber sale.

I am deeply concerned about this project on four main points:

Environmental Justice, including subsistence rights

Loss of "Roadless" values

The impact to other local economies

A flawed NEPA analysis

I urge you to cancel the timber sale immediately, and protect the splendor of Gravina Island for future generations of Southeast Alaskan residents and its hundreds of thousands of yearly visitors.

I have walked on Gravina Island, and lived in Ketchikan. Some of my comments draw upon that experience. I want to make a special point, however, that these are *national* forests, and owned by the people of the United States everywhere. Please consider all comments carefully and consider what Americans want when making your decision.

Environmental Justice: The DEIS fails to adequately assess the impacts to certain low-income/native communities affected by the sale. The analysis jumps through the hoops, but attempts to appease the people of Saxman and Metlakatla rather than legitimately addressing their concerns.

CT-22

On page S-7, under Significant Issues, the DEIS states that Issue B: Subsistence, is addressed by Alternative 3. Does that mean none of the others do? The Forest Service, it turns out, is preferring to adopt Alternative 4, the alternative with the most significant impact to subsistence and native rights. That seems to be clearly ignoring the evidence. It seems it is failing to address subsistence and failing to work to mediate it.

CT-15

Why don't we have an alternative that addresses Issues A, B, and C?

In my conversations with local people, including official representatives of the communities of Saxman and Metlakatla, I learned how vehemently they are opposed to roadbuilding and clearcuts on Gravina island. Historical sites, subsistence gathering and hunting, and a way of life will be forever harmed. You must listen to their voices.

CT-3

Appendix B

The DEIS also admits to a violation of ANILCA, on page 2-7 and 2-8. "... Alternative 4, under this alternative there is a possibility of a significant restriction on subsistence use of deer. What are the results of the Section 810 subsistence evaluation and subsistence hearings? I would like to request a copy of any findings on this topic. I have heard that, in a recent subsistence hearing regarding the timber sale-every tribal member who testified supported the no-action alternative as the only one that would protect traditional uses. Thank you.

CT-15

Executive order 12898: The DEIS states that implementation of any project alternative will have disproportionate adverse effects to minority or low income communities. This is not true. Alternative 1, despite what the DEIS seems to imply, will not adversely effect areas like Metlakatla. They can not afford to bid on the large sales offered by the Forest Service on Gravina, so it is no gain for them. They may get some jobs, but many jobs will come from migrant loggers, reducing the benefits.

CT-22

Roadless Values: Almost two million Americans who commented last summer, plus millions more making up a vast majority in the country, are waiting for the Roadless Policy to be carried out. The maneuvering by the new administration and the timber industry are appalling and in defiance of the public will. They ignore the scientist lined up to tell how Roadless values need to be protected for ecological sustainability. There should be no sales offered until the Roadless Policy is resolved. Serious harm could occur in the meantime. The Gravina Island sale is a particularly glaring example of this. It will destroy all roadless value for Gravina island forever, causing irreparable harm to the ecosystem and the character of the region.

CT-1

The no-action alternative is the only one that will protect roadless values. Page S-7 of the DEIS lists the impact on roadless character under its minor concerns in the subtype. It states that this is addressed through Alternative 5.

CT-1

Why don't we have an alternative that addresses Issues A, B, and C?

Impact on other local economies:

There are numerous small businesses that rely upon the wilderness values of the area surrounding Ketchikan. These businesses are sustainable for years into the future, with this timber sale will come and go. There is clearly a direct conflict between the use of land for a "kayaking experience of a lifetime" and for the destruction of a clearcut forest. Proceeding with this timber sale will cause irreparable harm to local businesses reliant upon fishing, diving, tourism, and other profitable uses of the land. It will not only harm existing businesses, but future opportunities for Gravina tourism as well.

CT-6

It is clear to anyone, especially you Jerry, that Ketchikan harbors emotional and aggressive defenders of the timber industry holding fast in the old guard. It is frequently uncomfortable or even unsafe for individuals and businesses to speak their true feelings and concerns. There is a growing majority in the community that wants to see a new,

more sustainable pattern of growth and an end to massive timber sales in old-growth. Please hear them somehow.

Under *Significant Issues, Issue A: Timber Economics*, the DEIS states that people are concerned about the economic viability of timber harvest and the impact of timber harvest on other livelihoods in the Ketchikan area. Alternative 2 supposedly addresses this issue and you haven't selected it. Therefore, I assume that this issue was not ultimately addressed. Alternative 4 clearly does not address it, as it maximizes the impacts on subsistence rights and on other users, for the goal of increasing economic gain for the timber industry. Biased.

Why don't we have an alternative that addresses Issues A, B, and C?

Flawed NEPA analysis:

Thank you for your time and effort working on this project. Despite my criticism, the local knowledge also contends that the Forest Service worked many hours attempting to make this a timber sale that the public could swallow. That effort is appreciated. But I have to be strong in my adamancy that this sale and its analysis are fatally flawed and biased. The efforts were spent in a Public Relations production that resulted in phony looking pictures of simulated cuts that misrepresent the true impact, as is clear to anyone who has been to the Tongass. The DEIS lays out all the facts, twists them up, then selects the alternative that is the greatest subsidy to the timber industry, is the only alternative with a significant negative impact on subsistence users and native rights, harvests the most trees and most acres possible, uses the most helicopters, builds the most roads, kills the most deer (10.3% reduction, and therefore wolf and bear as well), crosses the most streams (34), and degrades the most viewsheds. It is the only alternative to leave access open to roads (16 miles) after harvest complete. Was the preferred alternative chosen by a rational person?

S-8 states what alternatives were considered for study. Alternative 1 is the no-action alternative, and the alternative that myself and millions of Americans support. Yet the Forest Service deals with this alternative in a very flippant and impractical manner, stating it is included simply due to pesky regulations of the CEQ, and that this alternative represents a "baseline." In fact, NEPA and the CEQ state that a no-action alternative must be considered as a legitimate alternative to a wide range of action alternatives. In the unfortunate case of Gravina island, it is inferred that the Forest Service has not given this alternative serious consideration. It has also not adequately determined the impact on other local economies, has not considered the cumulative effects of things such as the Gravina Access project, and has arbitrarily and capriciously chosen an alternative satisfying to its friends in the timber industry.

CT-12

CT-14

Again, why don't we have an alternative that addresses Issues A, B, and C?

We do, it is the no-action alternative. Please, select Alternative 1. Gravina island is one of the natural treasures of the entire United States. Its value is limitless in that capacity.

CT-12

Appendix B

This timber project as proposed will change the island forever, changing Ketchikan, Southeast Alaska, and even the global climate in relative ways. Think long term. Think about work and wilderness for your children to experience.

Thank you for the opportunity to comment. Act with love and courage.

Joshua Martin
Friends of the Tongass
813 South Stull Ave.
Bloomington, IN 47401

507 Pittinger Ave.
Ketchikan, AK 99901
June 26, 2001

Mr. Jerry Ingersoll, Supervisor
Ketchikan Ranger District
Ketchikan, AK 99901

Re: Gravina Island Timber Sale

Dear Mr. Ingersoll,

Please accept this as a letter of support for the Gravina Island timber sale.

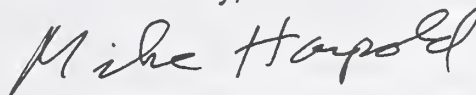
Since the close of the pulp mill, those who have relied on the timber economy of Ketchikan have had to pin their hopes on the development of smaller, more diverse timber industries. The community was urged to move in this direction by many who advocated the closure of the mill. Here we are. However, if people in the community are going to be able to rely on sustainable timber related jobs, the operators who provide those jobs must be able to rely upon a predictable supply of timber. For this reason, I support the Gravina Island timber sale.

CT-7

I have also been concerned that view sheds be protected. I have been assured by your staff that view sheds have been considered in the Gravina Island plan and have been protected to the extent possible. View sheds are not only important for the visitor industry, but contribute to the quality of life of those of us who choose to live in Ketchikan.

CT-6

Sincerely,



Mike Harpold
907-225-1315

Appendix B

Gravina Island Timber Sale-Draft Environmental Impact Statement

Statements of June 26, 2001:

Merle Nancy Hawkins

Haida Tribe

Resident of Alaska

Resident of Ketchikan Alaska

Delegate of Tlingit & Haida Tribes of Alaska

Subsistence user on Gravina Island

On page one, paragraph one of the DEIS, a letter from Thomas Puchlerz, his statement that his preferred alternative 4 emphasizes positive economics and recreational access on Gravina Island. I disagree, with his statement that alternative 4 while it changes the subsistence use, still maintains the resources for subsistence users. On page 2-7 & 2-8 of the DEIS under the ANILCA heading, Mr Puchlerz statement is contradicted, as it states that due to the open road system proposed for alternative 4 there is a possibility of a significant restriction on subsistence use of deer. This does not conform to the requirements of ANILCA (16 U.S.C. Sec. 3100 et seq.)

CT-15

ANILCA was passed in 1980 to ensure that public lands in Alaska, including the Tongass, are utilized in a way that causes the least adverse impact possible on rural residents who depend upon subsistence uses of the resources. The following provisions set forth in Title VII of ANILCA are designed to achieve that goal:

- Protecting subsistence uses: public lands in Alaska including the Tongass must be utilized to cause the least adverse impact possible on rural residents who depend upon subsistence uses of natural resources: logging that would “significantly restrict subsistence uses: cannot proceed until (1) A public hearing is held in the affected area, (2) it is determined and that the proposed action is necessary and involves the minimal amount of land needed to accomplish the purpose; and (3) mitigation measures are established to minimize adverse impacts on subsistence uses.
- Requiring subsistence evaluations: for proposed timber sales, the Forest Service must conduct subsistence evaluations to determine: (1) the sale’s effect on subsistence uses and needs; (2) the availability of other lands or alternatives that would reduce subsistence impacts; and (3) whether the sale would “significantly restrict subsistence uses.”
- Protecting fish and wildlife: “healthy” (i.e. huntable populations of fish and wildlife must be maintained on the Tongass to satisfy subsistence uses and needs:
- Requiring cumulative impact analysis: federal agencies must address all cumulative impacts of proposed action on subsistence uses and need in an EIS.

CT-15

Harvests of deer are currently near maximum sustainable levels for much of Southeast Alaska. Further declines in habitat will lead to a shortage of deer and increase conflict among users. Gravina Islands average annual harvest of sitka black-tail deer by wildlife analysis area, 1987-1996 shows that Gravina Island harvest level at 100-200 deer

harvested annually. Our tribal members depend on this food to sustain them and their families.

On page S-2 Purpose and need for action. The land use designations for Gravina land under the Forest Plan are timber production, scenic view shed and old growth reserves. Unfortunately subsistence is not a land use designation and it should be.

Economics ,recreational access and subsistence are some of the land use designations for Gravina Island. The Island is too small to maintain all of those multiple uses, which are not at all compatible. The only LUD that makes any sense for Gravina Island is the old growth reserve; which protects the old growth forests.

Alaska Native traditions, spiritual health and cultural considerations are directly related to subsistence issues and uses. For this reason, I would like to see the Bostwick Inlet area left undeveloped as any LTF's would have a major detrimental impact on subsistence hunting, fishing and gathering in the area.

CT-3

I do not want a log transfer facility, barge drop or logging road in Bostwick Inlet area. However given the economic consideration of our area, if the road is to be developed for logging under alternative three, then I would like to see that the culverts used to develop roads are removed permanently after the logging is done, so that Gravina Island remains a roadless area.

CT-3

A common goal that I share with some people is to protect the resources in our area. A balanced approach for use of the natural resources will benefit all people now and for generations to come and I wholeheartedly support this methodology.

Many subsistence users rely on the abundance of the natural environment for food, cultural and traditional values, livelihood, and quality of life. Healthy populations of fish and wildlife represent natural wealth that, if conserved, will continue to provide for generations to come. In addition, subsistence and traditional use remain a major element of community economic and cultural life. Therefore the conservation of forest and stream habitats is central to protecting our future. Because Gravina Island is so easily accessible to Ketchikan residents it is used extensively for hunting, fishing, gathering and harvesting of a wide variety of plants, fish and animals that depend upon healthy marine and terrestrial ecosystems. Some of these include salmon, marine mammals, marine invertebrates, birds, deer, other fish, plants and other land mammals. This is a partial list of some of the resources utilized by Alaska Natives: Crab, cockles, clams-butter, littleneck clams etc., black bear, beach asparagus, goose tongue, wild rhubarb, fiddlehead ferns, berries-blue, huckleberry, cranberry-low bush and bog, gray currents, nogan berry, ect.

CT-15

The subsistence gathering and collecting of plants and berries involves many spiritual attributes. It teaches family values, family history, clan history, traditional clan land uses and ownership of areas, respect for the land, respect for the elders, geography, caring for

Appendix B

and teaching younger children and many other values which cannot be taught any other way. There are ceremonies involved with subsistence, such as the sharing of food , the rite of the first hunt and distribution of food to elders and family.

The gathering and processing of plants, berries and other natural resources usually involves multiple generations of family & relatives, such as grandmother, mother, sisters, brothers, cousins, and grandchildren. It is more than just getting food to survive. It involves many spiritual aspects which cannot be expressed in words.

My preferred alternative is alternative 3. This allows timber harvest yet protects the Bostwick Inlet area. My second choice is Number 5-helicopter harvest. This allows balance by allowing timber harvest but closing the roads after the timber harvest. CT-12

Thank you for your consideration of my comments.

Sincerely

A handwritten signature in cursive script that reads "Merle Nancy Hawkins". The signature is written in dark ink and is positioned above the printed name.

Merle Nancy Hawkins

June 20, 2001

Jerry Ingessoll
District Ranger
Attn: Gravina Island
3031 Tongass Ave.
Ketchikan, AK 99901

Dear Sirs,

After reviewing the Draft Environmental Impact Statement for the Gravina Island Project, I would urge the Forest Service to choose Alternative 1 - NO ACTION.

CT-12

A loss of \$178.00 per MBF occurred on average from 1996 through 1998 for all commodity timber sales on the Tongass. (RAC FEIS 3-298) Timber economics is listed as the priority issue in the Gravina Island DEIS while Fish habitat and water quality are listed under "Other concerns not to be considered significant issues." (1-15)

CT-7

CT-5


THE STREAMS OF ALASKA AND PARTICULARLY SOUTHEAST ALASKA ARE THE LAST IN THE WORLD TO SUPPORT WILD ANADROMOUS FISH POPULATIONS OF ANY SIGNIFICANT SIZE.

Please weigh the comments and science from the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service and the local Native groups against the comments of the Ketchikan Chamber of Commerce, the Alaska Forest Association and the Ketchikan Gateway Borough. Perhaps the latter three groups could invest in some of the hundreds of tree and fish farms in production around the world for economic profit and stop coercing the U.S. Forest Service to elevate timber harvest demands over other uses using a flawed Market Demand analysis. The Forest Service could then finally adhere to the 1964 Wilderness Act. "It is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness."

Finally, if Alternative 5 is chosen, I would ask that the large deep in Bastwick Inlet be dropped entirely based again on the concerns of local Native groups and the comments of the ADF&G and the USFWS.

CT-3

JACOB
PO BOX 1721
WARD Cove, AK 99928

Thank you, 
Bill Jacob

JUN-26-01 TUE 15:26

P. 02



Greater Ketchikan Chamber of Commerce

P.O. Box 5957, Ketchikan, Alaska 99901

(907) 225-3184 • FAX: (907) 225-3187

June 20, 2001

Jerry Ingersoll
District Ranger
Attn: Gravina Island
3001 Tongass Ave.
Ketchikan, AK 99901

Dear Mr. Ingersoll:

The Ketchikan Chamber of Commerce represents a diverse membership that supports the socio-economic well-being of Ketchikan's community. Our 400 members include local and regional businesses, non-profit entities and individual Ketchikan citizens.

The Ketchikan Chamber of Commerce supports the US Forest Service proposal to harvest timber from the Gravina Island Timber Sale project area. The Chamber believes that the Forest Service should maximize the output of all goods and services available from the Tongass National Forest consistent with the revised Tongass Land Management Plan (TLMP). This includes maximum utilization of timber sale opportunities in areas of the Tongass that are designated Timber Production in the revised TLMP so that manufacturing facilities in Ketchikan and elsewhere in Southeast Alaska have an opportunity to purchase sufficient timber to meet their manufacturing needs. This also includes creating roaded recreation opportunities for the citizens of Ketchikan.

CT-7

CT-6

The Chamber supports the purpose and need evaluation for the Gravina Island Timber Sale as stated in the DEIS. The Chamber particularly agrees with the following points made in the DEIS: the agency should 1) improve timber growth and productivity on suitable timber lands made available for timber harvest, and manage these lands for long term sustained yield of timber; 2) contribute to a timber supply to meet market demand; 3) provide opportunities for local employment in the wood products industry, which in turn contribute to the local and regional economies of Southeast Alaska. The Chamber urges the Forest Service to offer as much economically feasible timber as possible from the Gravina Island project area while giving proper management considerations for the multiple use resources on the island.

CT-7

The Chamber supports the design and layout to timber sales that result in the opportunity for the purchaser to make money. Sales must be economical. It is noted from the DEIS that helicopter logging is one proposed method of logging, it is also noted that this method of logging costs approximately twice that of cable logging. Helicopter logging while a valid yarding method must be limited to only those areas where necessary to manage the resource and to harvest the timber. The Forest Service must offer timber sales that are economical and capable of being harvested with the purchaser making a profit.

CT-7

The forest products manufacturing focus in Southeast Alaska is changing, and manufacturing facilities in the Ketchikan area are among those leading the way to a new era. The new focus features the manufacture of specialty products, including window and doorframe components and veneer for the production of engineered wood products like laminated veneer lumber (LVL). Production of dried and dressed lumber and an increase in the output of cedar lumber are also under consideration. The Chamber supports efforts by local manufacturers to increase local industrial employment by targeting growth markets such as these, and urges the Forest Service to consider the importance of supplying these companies with an economical supply of wood through projects such as the Gravina Island project.

CT-7

The Chamber of Commerce supports Alternative 4 of the Draft Environmental Impact Statement.

Alternative 4 provides the best opportunity for the Ketchikan Ranger District to use the Gravina Island project area to contribute to the agency goal of meeting market demand for timber under the current Tongass Land Management Plan and at the same time provide responsible management to other resources and mitigate concerns.

CT-7

Even though this alternative offers the greatest amount of timber for harvest, it appears this is a very conservative harvest level. Actually we support more acres being harvested; this would provide more young stands for greater diversity of wildlife habitat.

CT-5

Of the 37,845 acres of forested land identified in the project area, 20,158 acres are classified as productive forest land. This alternative allows for the harvest and regrowth of new trees on 2218 acres. This represents management of 11% of the productive forest land and 5.8% of the total forested land within the project area. It does not appear that any more harvesting is planned even though 6802 acres were identified as suitable and available. You should be treating at least 3401 acres in this sale.

CT-7

As planned in Alternative 4, the main road from just north of the Ketchikan airport into the middle of the island must remain open following harvest for recreational and other uses.

CT-6

Appendix B

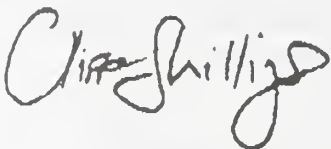
Some Ketchikan citizens have raised the subsistence taking of deer as an issue. We believe the DEIS adequately addressed the subsistence use on Gravina Island. We disagree with your statement on page 3-126 (last two sentences of the Finding) and find it difficult to draw the same conclusion. *"completion of a hard-link transportation system between Ketchikan and Gravina could under Alternative 4, lead to unsustainable levels of deer harvest. Therefore, under Alternative 4, increases in access and competition for deer may result in a significant possibility of a significant restriction on subsistence use of deer."* Gravina Island is predominantly all old-growth in nature; the vegetation has reached a stage where little or no new growth or diversity of habitat is created. The habitat has likely reach a low end of its capacity to support greater deer populations. The Forest Service no harvest policy in Old Growth Reserves, the 1000 foot beach fringe, stream buffers, and other restricted areas more than adequately provide for cover and winter habitat. The management opportunity to provide for greater habitat diversity (new growth) is being ignored. Harvesting 20% of the productive forest land every 25 years would provide the continuing diversity of habitat to produce more deer.

CT-15

CT-5

Thank you for the opportunity to comment and we look forward to seeing timber coming over the hill into Ketchikan and to driving the new road.

Sincerely,



Cliff Skillings
President

KETCHIKAN GATEWAY BOROUGH

Office of the Borough Manager • 344 Front Street • Ketchikan, Alaska 99901

Georgianna Zimmerle
 Borough Manager
 (907) 228-6625
 Fax: (907) 247-6625
 boromgr@ktn.net

June 19, 2001

Jerry Ingersoll
 District/Monument Ranger
 Attn: Gravina Island
 3031 Tongass Ave.
 Ketchikan, AK 99901

GRAVINA ISLAND PROJECT AREA DRAFT ENVIRONMENTAL IMPACT STATEMENT

The Ketchikan Gateway Borough (KGB) has reviewed the Draft Environmental Impact Statement for the Gravina Island Project, Ketchikan Ranger District, Tongass National Forest. This letter is KGB's response and comments regarding the Gravina Island Project

The KGB supports the proposal to harvest timber from the Gravina Island Project Area. The KGB believes that the Forest Service should make the maximum utilization of timber sale opportunities in areas of the Tongass that are designated for Timber Production by the Tongass Land Management Plan so that manufacturing facilities in Southeast Alaska have an opportunity to purchase sufficient timber to meet their needs.

CT-7

The KGB supports Alternative 4 with changes explained below. The changes are intended to improve safety during timber harvest operations, to improve timber sale economics and to improve recreational access.

CT-12

The DEIS's purpose and need evaluation for the Gravina Island Project include the following goals:

- ▶ Manage the timber resource for production of saw timber and other wood products from suitable timber lands made available for timber harvest, on an even-flow, long-term sustained yield basis and in an economically efficient manner;
- ▶ Seek to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest Timber and the market demand for the planning cycle;
- ▶ Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska; and
- ▶ Support a wide range of natural-resource employment opportunities within Southeast Alaska's communities.

KGB urges the Forest Service to offer as much economically feasible timber from the Gravina Island Project area as possible. KGB believes the purpose and need statement for the Gravina Island Project Area should include the following points:

Appendix B

Jerry Ingersoll

-2-

June 19, 2001

- ▶ Timber sales should be designed so they are economic to operate in all market sales because marginally economic sales do not facilitate stable operations and employment; CT-7
- ▶ In choosing helicopter units make sure that the economics of roaded areas are not destroyed. To log units with helicopters that can be roaded can make further road development less economical. Helicopter logging should be used only when necessary; CT-7
- ▶ Good timber management can transform certain decadent timber stands to a managed condition with healthier, faster growing trees; CT-9
- ▶ Good timber management can increase growth and yield from the managed stands so fewer acres are needed for timber harvest in the future; CT-9
- ▶ This project can help achieve the direction, in the Tongass Timber Reform Act, Section 101, to "seek to provide a supply for timber from such forest and (2) meets market demand from such forest for each planning cycle" to the maximum extent consistent with multiple use and sustained yield from all renewable forest resources; and CT-7
- ▶ This project can help establish transportation infrastructure on Gravina Island for future timber harvest and community use. CT-6

The KGB recommends that the Forest Service consider the specific comments in finalizing the Gravina Island Timber Sale(s) Project:

- ▶ The first three or four miles of access road from the Tongass Narrows should be constructed with appropriated dollars. This road will access many future sales and get much recreational use. It does not make sense to lessen the economics of the initial timber sale in this area by requiring the construction of this road as part of the timber sale offering;
- ▶ In unit 4, the clumps of recreation/visual reserve trees on the back lines should be incorporated into the cutting boundary to avoid isolating any of the timber behind the clumps. Also insure that the North East boundary is located where there are adequate anchor stumps for the planned skyline logging;
- ▶ In all partial cut units, insure that small groups of trees are cut rather than individual trees. This will lessen the risk of injury to workers from snags and other hazard trees during the harvest activities; CT-S
- ▶ Drop units 7 & 14 until a road system can be built to within no more than a mile of these units and on the same side of the hill as these units;
- ▶ If possible, enlarge unit 8 down the hill towards the main road to improve economics;
- ▶ If possible, enlarge unit 9 downhill to the lower road and try to eliminate the spur road to improve timber sale economics and lessen stream crossing impacts from the spur road;
- ▶ In all cable harvest units with clumps of reserve trees, insure that the reserve tree clumps are designed to allow safe, efficient cable yarding; eg. design the clumps with a tear-drop shape with the narrow part uphill and sides aimed at the landings for downhill logging and, conversely, with the narrow part downhill for uphill logging;

- ▶ In all units, insure all hazard trees can be cut as required by OSHA and safe work practices;
- ▶ In unit 13, try to leave areas of poor quality hemlock and spruce trees for the reserve clumps;
- ▶ Drop unit 19 and the accompanying spur road or enlarge the unit for economic improvement;
- ▶ For economic improvement in unit 20, plan for helicopter logging of all the volume and drop the spur road;
- ▶ Drop unit 28. This unit contains timber that is too low-value to justify helicopter logging;
- ▶ Enlarge unit 30 for economic improvement but insure there are adequate anchor stumps on the revised cutting boundaries;
- ▶ Enlarge units 31, 32, 34, and 43 up the hill as far as practical for cable logging. This will lower the road amortization for these units and greatly benefit the timber sale economics; CT-S
- ▶ Enlarge unit 39 to take advantage of the high value timber in the area;
- ▶ Design unit 45 for cable logging on the lower slopes and concentrate any needed leave trees in the higher slopes where the helicopter logging will take place;
- ▶ Enlarge unit 47 if possible;
- ▶ Enlarge unit 53 downhill if possible;
- ▶ Build a road system to access units 58, 60, 63, 64, 66, 68, 69, 70, 71, 72, and 104. The road system should be constructed parallel to the beach along Bostwick Inlet all the way to Nichols Passage. The swells and wind exposure in Bostwick Inlet are far too severe to safely moor a helicopter-landing barge or to deal safely with a helicopter logging water-drop. The 1000-foot beach fringe will adequately screen the visual impacts of the road. The units should all be redesigned to efficiently accommodate a cable yarding system. This change will greatly improve the economics of this timber offering; and lastly, CT-25
- ▶ Consider that units 73, 74, 75, 77, 78, 79, 80, 81, 86, 88, 89, 90, 91, 92, 93, 94, 95, 96, 105, 106, 107, 108, 109, are in an area that should be developed with roads to improve the economics of this timber offering and any future timber offerings in this area. Seal Cove has been used for a helicopter landing barge site in the past but the operator reported that it was only marginally safe and recommends that it not be used again. The access road to this area can be screened from Bostwick Inlet by leaving a 1000-foot beach fringe. Any units in this area that can be efficiently cable logged should be designed with that intent. CT-25

KGB also offers the following general comments;

- ▶ It should be noted that clear cutting an area improves habitat for small birds, small animals, raptors and deer; CT-9
- ▶ We urge the USFS to keep as many roads open as possible for recreational use; CT-6
- ▶ A close examination of Bostwick Inlet reveals that there is inadequate protection from swells and only one site, on the South West side of the inlet, has even CT-19

Appendix B

Jerry Ingersoll

-4-

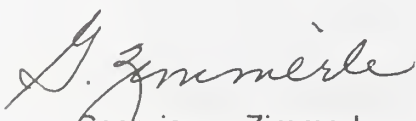
June 19, 2001

meager protection from the wind. This is not a safe site for an LTF. Tongass Narrows appears to be the best site for an LTF for this Island;

- ▶ The Sediment Risk Index analysis in the DEIS ignores that many streams in Southeast Alaska are nutrient poor and often benefit from small increases in sedimentation; CT-24
- ▶ Alternative mitigation measures should be allowed as a substitute for timing windows. This is necessary because the current overlapping timing windows for various fish and game species often compresses the time available for road building and timber harvest into unreasonably short periods; CT-5
- ▶ Bio-diversity and old growth reserves on Gravina Island should not be a concern. There are millions of acres of wilderness and monuments in the Tongass that provide for bio-diversity and old growth habitat. Many of these areas are near Gravina; CT-11
- ▶ The deer model that predicts 90-98% reduction in deer habitat capability does not appear to reflect actual conditions in 26 year old and older second growth stands. Deer use is typically very high in these areas and consequently there is less browse seen (the deer eat it). In addition, these stands can be commercially thinned to provide even more browse than is typical for an old-growth stand; and CT-18
- ▶ The market demand analysis described on page A-4 greatly underestimates the demand for timber sales. The mills in Southeast Alaska normally operate two shifts when an adequate, economic timber supply is available. The volume required for normal operations of the manufacturing facilities is the minimum demand for timber sales. If the existing mills have a normal operating capacity of 350 mmbf/year, then that is the market demand. Measuring market demand by looking at volumes purchased or processed at a time when economic timber was scarce is not a reasonable procedure. CT-7

As KGB stated in its scoping comments and as Forest Service employees have stated, the remaining available Commercial Forest Land must be carefully and intensively managed for timber production if the Forest Service is to be able to provide a supply of timber even approaching the Allowable Sale Quantity set forth in the Land Management Plan over the long term.

The Ketchikan Gateway Borough appreciated the opportunity to participate in the planning of the Gravina Island Timber Sale(s) project. Please contact me at (907) 228-6625 if you have any questions concerning these comments.


Georgianna Zimmerle
Borough Manager

25-Jun-2001 04:43pm From:DIV OF COORD

907 465 3075

T-881 P 001/002 F-018

FILE No.243 06/26 '01 PM 03:56 ID:Clerk Planning Offices FAX:907 247 8439

PAGE 1

KETCHIKAN GATEWAY BOROUGH

Department of Planning & Community Development • 344 Front Street • Ketchikan, Alaska 99901

Susan Dickerson
Director
(907) 228-6610
FAX: (907) 247-8439

June 26, 2001

Lorraine Marshall
Project Review Coordinator
Division of Governmental Coordination
240 Main Street, Suite 500
Juneau, AK 99811-0030

SENT VIA FAX: (907) 465-3075

Coastal District CommentsProject: Gravina Island Timber Sale -DEIS
Applicant: US Forest Service
State ID #: AK 0101-12JJ**Project Description:**

Harvest of up to 37 mmbf of timber from about 2,200 acres of forest land through several timber sales on Gravina Island between 2002 to 2005.. Project could include construction of approximately 22 miles of new road and one new log transfer facility tentatively planned in Tongass Narrows. The project's road may either remain open or closed depending upon the alternative chosen

Comments:

The Ketchikan Coastal District has reviewed the above referenced application and found it consistent with the following objective and policy contained within the Coastal Management Plan:

A.2.a. Existing State and Federal laws and regulations governing forest practices shall apply to timber harvesting; no further restrictions shall be imposed by local government.

Notwithstanding this policy, the Planning Department, as the coordinator of the local coastal program, would like to offer the following comments on the project.

As you are aware, the Borough is currently engaged in an update of its coastal zone management plan as well as preparation of a Gravina Island Development Plan. While neither plan has yet been published in draft form, we have completed draft inventories and analysis of various resources as well as held several meetings to discuss development goals with a variety of interested constituents. Based on this preliminary information, several development issues on the Island have emerged which are relevant to the proposed timber harvest.

Appendix B

26-Jun-2001 04:43pm From:DIV OF COORD

807 465 3075

T-881 P 002/002 F-018

FILE No.243 06/26 '01 PM 03:56 ID:Clerk Planning Offices FAX:907 247 8439

PAGE 2

Gravina Island Timber Sale DEIS

Page 2

Subsistence

- Bostwick Inlet, Bostwick Valley and its surrounding near shore areas have been identified by many plan participants as an important area for the subsistence and personal harvest of food and other items for cultural and family needs. CT-3

Recreation

- Gravina is viewed by many as a place to develop new recreation opportunities for a variety of local and visitor users including marine and land based facilities such as docks, cabins, and trails. CT-6
- Close coordination of fiscal resources and development goals between local, state, and federal agencies for construction and maintenance of new recreation facilities is viewed as an important component of a successful recreation development program on the island. CT-23
- The impact of new development, including roads and timber harvests, upon adjacent recreation uses should be carefully considered to avoid and minimize impacts. CT-6

Transportation

- Better access to the interior of the island for recreation needs is seen as an important need. However no clear consensus presented itself during the workshops regarding the best way to achieve this access. While some constituents favor an open road system that would allow vehicles, others have suggested a closed road might better protect other values such as those for subsistence, sport hunting, and recreation.
- Road access to Bostwick Lake is seen by some as an excellent new recreation opportunity to consider. CT-6

Timber Harvest

- In general, the Planning Department has heard at the plan workshops the desire for development of a sustainable local timber industry that provides adequate opportunities for participation by small operators, mills, and businesses. CT-7
- Many have expressed that proposed island development, including timber harvest, should adequately consider the complex range of competing resource values such as economic development, recreation, sport uses, views, and habitat values.

Thank you for your consideration of these comments.

Reviewed by:



John W. Hill
Coastal District Coordinator

c: Borough Manager
Planning Director
Planning Commission

K
J
C

Ketchikan Indian Corporation

2960 Tongass Avenue
Ketchikan, Alaska 99901
(907) 225-5158
Fax (907) 247-0429

RESOLUTION: KIC 01-23

TITLE: Ketchikan Indian Corporation opposes Timber Harvest on Gravina Island.

BY: KETCHIKAN INDIAN CORPORATION TRIBAL COUNCIL

WHEREAS, the Ketchikan Indian Corporation is a federally recognized Tribal government pursuant to the Indian Reorganization Act (IRA) of 1936 as amended; the Tribal Council is the governing body for KIC and is authorized by its Constitution and By-Laws as ratified on January 7, 1940; and

WHEREAS, the Ketchikan Indian Corporation Tribal Council is the representative Tribal government of the Ketchikan Indian Corporation, a sovereign, federally recognized IRA Tribe whose membership resides in the Ketchikan area; and

WHEREAS, the health, education, and welfare of its membership is of paramount importance to the well being of the Ketchikan Indian Corporation; and

WHEREAS, traditional Native lands on Gravina Island are being planned for large scale clear-cut timber harvest in the near future, and

CT-9

WHEREAS, these lands and adjacent lands and waters will be negatively impacted by said timber harvest activities, and these impacts will affect traditional Native subsistence activities for many generations.

CT-15

NOW THEREFORE BE IT RESOLVED, that the Ketchikan Indian Corporation Tribal Council supports "no action" as outlined in the U.S. Forest Service Alternative "1"; this is KIC's preferred alternative. In accordance with U.S. Forest Service practice, KIC resolves a secondary choice, which is known as Alternative "3".

CT-12

CERTIFICATION

The foregoing resolution was adopted by at a duly convened meeting of the Tribal Council assembled this 11th day of June, 2001, at the Ketchikan Indian Corporation, 2960 Tongass Avenue, Ketchikan, Alaska 99901, by a vote of 7 FOR, 0 AGAINST, and 0 ABSTAINING.

M. Edenso
Marly F. Edenso, President

6/12/01
Date

ATTESTED:
David Jensen
David Jensen, Secretary

6/12/01
Date

Memo

TO: Cathy O' Connor
U.S. Forest Service
FROM: Martha A. Johnson
SUBJECT: Objection to timber harvest on Gravina Island
DATE: June 26, 2001

Ketchikan Indian Corporation at its regular monthly meeting of June 11, 2001
passed the attached resolution objecting to timber harvest on Gravina Island.

maj

From the desk of: Martha Johnson
Administrative Assistant to the Tribal Council
Ketchikan Indian Corporation
2960 Tongass Avenue
Ketchikan, Alaska 99901
Ph: (907) 225-5158
Fax: (907) 247-5158

P. 1

247-0429

KETCHIKAN INDIAN CORP.

26 01 10:45a

P O Box 516
Haines, Alaska 99827

June 25, 2001

U.S. Forest Service
Chief Dale Bosworth, USDA - Forest Service
P.O. Box 96090
Washington DC 20090-6090

Dear Chief Bosworth:

I am writing to beg you not to allow the cutting of timber on Gravina Island or other targeted logging ~~Sites~~ in Tongass National Forest, because it is a place dear to our hearts in this whole area. When I see the old loggers with their injured bent legs limping around town, I see another reason why men should choose a less dangerous kind of work; and towns in S.E. Alaska have received compensation for not being permitted to log and are turning to other pursuits. It is the ever-hungry timber industry which considers nothing but their personal gain--not the animals, not the ancient trees which may still remain.

CT-8

I know this will be hard to accomplish with the latest Bush appointees into government departments relating to our natural resources, but do the best you can.

Sincerely,



Maisie Jones

e-mail: maciehaines@webtv.net

cc Jerry Ingersoll, District/Monument Ranger
Att. Gravina Island,
3031 Tongass Ave.
Ketchikan AK 99901

Appendix B

Jerry Ingersol
District Ranger
Tongass National Forest
Ketchikan, AK. 99901

Tongass Tribe
125 Main St.
Ketchikan, AK

Dear Sir:

Please include these comments in the public record for the Gravina Island **DEIS**. My name is Elmer Makua, my position with The Tongass Tribe as the Tribal President and these comments are from efforts of people putting in many hours of research and study of the EIS documents, interviews with the residents and attendance at the formal hearings with the Forest Service.

Thank you for this opportunity to give comments, we are fortunate that there is a process to address these many different issues. To fully be informed with the correct information, references and documents are essential to the process.

I'm writing to you today to express our concern about the Gravina Island timber sale proposal and the research to even consider planning for a timber sale that will affect the subsistence communities and the Ketchikan area as a whole.

CT-15

We have been involved with this timber sale proposal from its beginning, and can see just how it will impact the natural resources that are already available to everyone.

The Tongass Land Management Plan(1977), is a Vague Description and The Land and Resource Management Plan(2000) doesn't really say it either, it should be called The Management of Human Impacts On The Land and Resources.

The Draft Environmental Impact Survey is a well written Document and it must of taken many hours and a task force of personnel to compile all of its information, but after reviewing the compiled information I have many concerns.

The concerns I have, are both obvious and obscured, first of all the presentation of the information can be misleading if not elusive.

(for instance) The Summary:: in the summary, the Introduction states that the Draft Environmental Impact Statement (EIS) for the effects of proposed timber harvest and related activities in the Gravina Island timber project, is in compliance with the National Environmental Policy Act and other relevant laws and regulations.

Because this is a Draft of the Environmental Impact Summary, it is presumptuous to state that it complies with the National Environmental Policy Act, This statement should present itself only in the final.

CT-22

Again; Mister Ingersol, I need to acknowledge your position as the Forest Service District Ranger and a responsible official for this project as a very important position and you have many things to consider so pointing out every little vague assumption may not be the best course of action.

Currently with all the political pressures for a sustainable resource, to seek a timber supply to meet the annual market demand, and provide a diversity of opportunities of uses that contribute to the economy of the Southeast of Alaska, can at times seem overwhelming I'm sure.

I'll not take up too much of your time so I hope you don't mind my need to refer to the NEPA cfrs. from time to time to help keep focused on the point of reference, which is not meant to in any way criticize the DEIS or its content but to help better explain my questions.

The comment from the Tongass Tribe is to reflect "No support for this proposed Gravina Island timber sale" and the NEPA process the Forest Service has presented. The following questions are major concerns about the extreme impacts on the environment and the natural resources by this timber sale. The sensitive balance of an ecosystem that has shown to provide a way of life for the communities will be impacted by such a timber sale.

CONCERNS:

In chapter 1. PURPOSE AND NEED; Under Proposed action; It is stated the boundaries and/or locations of three small old growth reserves would be adjusted through an amendment to the forest plan.

QUESTION #1: Is it a policy of the Forest Service to make adjustments and /or amendments to the forest plan and where is this process at in negotiations? and is it reflected in the EIS?

CT-11

In the same chapter, next line: The proposed action also would provide recreational access from the proposed logging road.

QUESTION #2: Does suggesting access for recreational purposes from any road system, change the guidelines for a logging road for the corp. of engineers?

CT-16

Appendix B

In the same chapter under Decisions to Be Made; the words whether and how are used to show a decision process. And then there are four decision factors that are listed.

- The locations, designs, and scheduling of timber harvest, road construction, log transfer facilities, and silvicultural practices;
- Access management measures (road, trail, and area restrictions and closures associated with the timber sale project);
- Mitigation measures and monitoring requirements;
- Whether any changes in small old-growth reserves should be made and approved as an amendment to the forest plan.

QUESTION #3: Should there also be a decision factor stating “No Action”?

CT-12

In the same chapter under Project Area Desired Future Condition; this section mentions how the sawtimber and other wood products would be managed, then states however, as directed in the 1999 ROD, timber harvest will be scheduled on a 200-year rather than a 100-year harvest rotation to better conserve deer habitat. Then further down mentions, Recreational opportunities associated with roaded settings, from Semi-primitive to Roaded Modified are available.

In the same chapter states; In the following descriptions there are the future desired conditions that will guide the Forest Service’s management of the project area suitable timber lands in a manner consistent with the Forest Plan and the special circumstances of the area:

Mentioned are;

1. Soil productivity will be maintained while using the resources,
2. Aquatic productivity will be maintained or enhanced.
3. Maintain fish habitat, stream bank and stream channel function, large woody debris supply, water quality, and fish passage through crossing structures.
4. Biologically important habitats will continue to be represented in the project area so that a full spectrum of wildlife habitat needs is accounted for and landscape biodiversity is maintained.

5. Wind-prone areas will be managed to limit harvest induced windthrow.
6. Project area will be managed on a 200 year timber harvest rotation.
7. Maintain the current setting around existing recreation facilities and identify and enhance new recreation opportunities throughout the project area.

QUESTION # 4. Isn't it fair to say that with the Forest Service under court order to prepare a supplemental EIS that would evaluate all Tongass Roadless areas, which includes Gravina Island, would need to take a closer look at the wilderness suitability for the Gravina Island project as a wilderness area? And that the analysis's done for the 1999 ROD based on a 200 year rotation harvest will need to be redone.

CT-2
CT-14

QUESTION #5. Would a new Tongass Land Management Plan need to be developed after the appeals dealing with the inadequacy regards to protection of wildlife viability and subsistence in the 1997 plan that were in appeals court have to be re-settled?

CT-2

QUESTION # 6. It is very plain to see that this document though has a lot of information, it fails to provide the complete data and can be misleading. As stated in #2. Aquatic productivity will be maintained or enhanced, where does it show a plan of maintenance or enhancement?

CT-5

QUESTION # 7. When aquatic productivity is mentioned it makes me think of all the other Subsistence uses other than the deer model that is used and that is explained quite extensively, there are no models to show all the other substances that are harvested, no studies to show the impacts on the aquatic productivity and where is the studies or analyzed information to the consumption patterns of the subsistence users?

CT-15

In chapter 3 Environment and Effects, under Environmental Justice. The Executive Order 12898 that is referred to, only identifies the community of Metlakatla as a low income, minority community affected, The Native City of Saxman is also a low-income, rural minority community, that is also effected by the disproportionately adverse human and environmental effects on subsistence uses, but most importantly there are no Alternatives that address this fact. It is stated in alternative 1. Metlakatla (which is already diversifying their economy with tourism and other trade industries) and as it has been mentioned they have already felt the impact of the closing of two mills and is not able to come up to operate for small sales.

QUESTION# 8. If this is true than how would Metlakatla be disproportionately impacted again?

CT-22

how this timber sale is going to impact the minority, low income populations but there are no alternatives that truly address all the impacts and that desired future condition. There are also those future accumulative impacts that will need to be addressed, plans to show how the recreational access will be trafficked to guarantee protection for the historic sites that have been determined significant and for these sites be monitored through out and into that desired future condition.

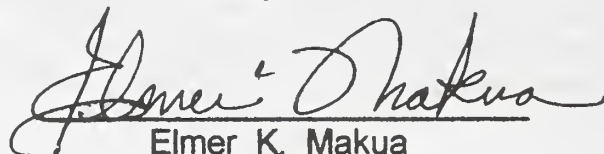
CT-22

CT-4

Conclusion; There are numerous misrepresentations of the NEPA process and the lack of compiled studies with accurate scientific analyzed information to better produce an informative document which is intended to help public officials to make decisions that are based on understanding of environmental consequences.

We of the Tongass Tribe strongly stand by our recommendations and request that the Forest Service select Alternative #1. No Action.

Cordially,

A handwritten signature in dark ink, appearing to read "Elmer K. Makua", written over a horizontal line.

Elmer K. Makua
President

June 25, 2001

Jerry Ingersoll
 District Monument Ranger
 3031 Tongass Avenue
 Ketchikan, Alaska 99901
 ATTN: Gravina Island Timber Sale

Dear Sir.,

The fundamental flaw of the Gravina Island timber sale alternatives proposed in the draft environmental impact statement is the underlying assumptions. What really ought to be done is to postpone a decision on Gravina Island Logging until after the uncertainties over the Tongass land Management Plan and the National Roadless initiatives have clarified themselves, and the future of Gateway Forest Products is less murky.

CT-7

Taking the last first, Gateway Forest Products is in bankruptcy reorganization, it's reorganization plan is due any day now. Unfortunately, no rectifiable management error has been identified, rather it's major lender says the operation is truly bankrupt, and ought to be liquidated rather than being allowed to devour more capital when the major lender says liquidate, the usual result is either liquidation or cashing that tender out.

The absence of new capital and the absence of being able to operate at a profit, means liquidation, the veneer plant is going down!

The new government in British Columbia is unlikely to subsidize the pulp mill in Prince Rupert, and the utility log market there is also likely to disappear. All of which means that the market demand for stumpage in the Ketchikan vicinity is going to nose dive. Herring Bay Lumber doesn't need very many saw logs.

Admittedly cutting off Gateway Forest products supply of timber, if it was an otherwise reliable company, would kill it.

CT-7

Even cutting off it's timber supply five years out could sound the death bell, all but with a five year windup and orderly shutdown.

Understandably the forest service does not wish to be seen as reneging on its explicit and implicit promises that Gateway stumpage needs would be met with adequate timber sale offerings. This is rightly so, but the forest service should be thinking in terms of expanded offerings in places such as Carroll Inlet or let in its contingency plans for 2006-2010 in the event new management finds a way to operate Gateway Forest Products (or more likely the new company that rises from its ashes) profitably and calls the Forest Service on its promises of stumpage. But the demand for logs appears headed for the cellar, and in that event Gravina Island should not be opened up with logging roads, even temporary one that are intended to be closed up after the last unit is logged.

As indicated above, the major flaw in the draft Environmental Impact Statement is its assumptions. As discussed above, the assumption that Gateway Forest Products is reliable is a poor assumption and unlikely to be predicted by future events.

The second flawed assumption is that the population of the Ketchikan area is going to grow over the coming decades. The 2000 census makes clear Ketchikan is shrinking in population. This shrinkage is occurring despite an ongoing infusion of

Appendix B

State and Federal dollars into the Ketchikan economy. Short of successful opening of the National Wildlife Reserve on the northern slope, the influx of state dollars is going to cease in the next two decades. After that, incoming state dollars will be fully balanced by out going state taxes. This rising cost of living will result in a further immigration from Ketchikan. The best guess I have is that the population will stabilize at between 6,000 to 8,000. The assumption of an ever growing population was made in the early 1990s and is now being overridden by the larger economic forces at work.

The third mistaken assumption is that Ketchikan will continue to be classified as urban under the ANILCA rural subsistence preference, the urban-rural dictionary drawn by ANILCA is in a fact a continuum. There are degrees of urbaness and ruralness, but that is all. The pattern since the initial classification is that evermore areas are being reclassified as rural, with Kenai classed as rural can Ketchikan be far behind?

CT-15

Further, Ketchikan's economy is going to look increasingly like a rural economy-intense summer activity followed by the fall, winter and spring doldrums. Ketchikan is already rural for many are dependent of Aquaculture programs, it is going to be classed as rural for ANILCA purposes within a very few years.

The final fatally flawed assumption is that the Tongass Land Management Plan is valid. It is not, Judge Singleton has ruled the 1997 Plan was based on the continued operation of the Sitka and Ketchikan pulp mills. It is simply too far out of date to be substituted for the new invalidated 1997 revision.

The only management scheme in place is the Tongass Return Act, supplemented by the multiple use law. As indicated above, log demand in Ketchikan can be expected to fall with the demise of Gateway Forest Products. While contingency plan ought to be made to be able to meet Gateway Forest Products demand, the preference should be for fill in cutting along existing roads rather than putting in new roads on Gravina Island, this is a bad idea. The original justification of meeting timber demand has melted away, and it is now time for the plans to log Gravina to be indefinitely shelved for a century or two.

CT-7

Never the less, bureaucracies typically generate a momentum of their own, plans drawn by a bureaucracy get implemented by it unless affirmatively stopped. The plans for a Gravina Island Timber Sale should be affirmatively stopped, the reason is because all four of the action plans discussed in the draft Environmental Impact Statement flunk the concept of perpetual multiple use, the lynch pin of the analysis has to be the game management plan. While big game migration and immigration undoubtedly occurs, the draft EIS rightly assumes the affect is not statistically significant. The normal cause of events is that the big game carrying capacity of a unit is increased in the years following logging, due to removal of the overstory generating ground level replacement growth, which fuels the food chain as deer browse. After a decade or so, the new growth is sufficiently tall enough to be out of reach of deer, and its carrying capacity is decreased until the new growth trees begin to fall over from old age.

CT-18

Perpetual multiple use says that instead of generating a boom and bust cycle as all four of the proposed action plans would do. The timber harvest, and the opening of the overstory should be done in equal and at increments over the rotation period for

the forest area involved in the game management area. Thus, where the logging rotation is 200m years, 1/200th. Of the timber is to be cut each year. This means a new plan for small cuts every year, and not any of the four proposed action alternatives.

CT-9

The draft EIS makes increased hunting pressure on Gravina Island deer is predicted for the coming decades. It seems stupid to manage Gravina Island deer for a population crash just when new restrictions are likely to be going into place on Prince of Whales Island. Rather the goal should be for maximum feasible sustained deer yield. That result is not available under any of the five alternatives in the draft EIS needs, at the very least to be supplemented with a draft EIS for an alternative timber harvest that maximizes the sustained yield of deer.

CT-20

The key to such a logging plan being economically reliable is to design a plan for a small operator with a small crew working steady, rather than for a large operator who cuts all the available timber in one fell swoop and then moves on. Sustained yield of deer needs more analysis than the draft EIS gives it.

CT-7

cc: saxmancity@pti.net
 saxman@eagleptialaska.net
 www.city.ketchikan.ak.us
 www.borough.ketchikan.us
 kevin-hanley@evircon.state.ak.us
 Knowles@legis.ak.us
 taylor@legis.state.ak.us
 http://www.state.ak.us/local/akpages/fishandgame/
 tpuchlerz@ss.fed.us

Very Truly Yours

Maurice Charles SR.

Appendix B

Hotmail Folder: Inbox

Page 1 of 2

Subject: gravina

Date: Mon, 25 Jun 2001 15:34:27 -0700

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Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Avenue
Ketchikan, AK 99901

A few days ago I was over by Point Francis on the Cleveland Peninsula where LP staged their barge-landed logging of their Granite Creek parcel.

Is this what we mean by a "managed" forest?

Is this the price of progress?...Knocked down trees, numerous widely-scattered bundles of logging slash, bundle wire hanging in the trees like ornaments. This is the legacy the helicopters left on public land on the Cleveland Peninsula when they logged LP's Granite Creek parcel.

I believe I understood an enforcement officer to say the helicopter company was fined and had cleaned up their mess. Obviously they haven't cleaned up their mess as of June 22, 2001, several years after the logging took place. I now wonder if they were even fined?

I've pictures and GPS coordinates of at least ten bundles of logging slash. I don't doubt there are at least thirty bundles, probably more, and scattered enough to make thorough cleanup expensive and unlikely to ever happen. I see no evidence that this kind of crap won't happen on Gravina as well. Like some kind of wild vermin, consuming what they can and urinating on the rest, the segment of the timber industry responsible for this has neither shame nor scruples when it comes to respect for the land.

Furthermore, many of the stewards and managers overseeing our public lands get rotated to other regions before they ever have the chance to develop a sense of place. They simply engineer radical compromise to the landscape and its carrying capacity, then move on.

I suppose industry and USFS will argue that handloggers left the limbs and tops in the woods, therefore the practice is justified on a larger scale. Not! A free-use harvester that knocked down that much incidental timber would probably not be allowed any more free-use wood and would have had the knocked-down timber deducted from his ten-thousand feet.

A sad testimony for a country that has landed a man on the moon.

I've already made numerous comments re the Gravina sale and would like to add only that judging from the Ketchikan Borough's comments compiled by AFA, the timber industry just doesn't get it.

Those AFA, and hence Ketchikan Borough, comments fail to even hint at the public subsistence hearings in which substantial opposition was expressed toward this Gravina timber sale.

Furthermore, the Borough's own Planning Department, which is deeply involved with a Gravina Island Comprehensive Plan had no input into those very logging-centered AFA/Borough comments.

The Borough Assembly, already immersed in dealing with a very questionable Gateway Forest Products management had the AFA-generated comments placed on the table at the last minute. Little, if any input emerged from that

CT-22

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elected body either.

The USFS's misuse of HSI's (Habitat Suitability Index's) became evident in AFA's attempt to correlate actual deer numbers with HSI. My understanding is that HSIs are simply a means of comparing relative deer carrying capacity between harvest units, and are not a measure of actual deer numbers in the area.

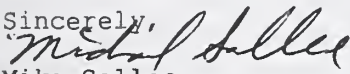
CT-18

Cavity nesters, especially those favoring high volume old growth areas will be the losers in a scenario that favors clearcutting.

CT-9

The USFS does a disservice to the people with its large corporate-centered mandate to get out the cut. Leave Graviņa alone. I support alternative 1, NO ACTION. Thank you.

CT-10

Sincerely,

 Mike Sallee
 PO Box 7603
 Ketchikan, AK 99901

Appendix B

District Ranger;

(June 25, 2001)

Ketchikan-Misty Fjords Ranger District;
Tongass National Forest
3031 Tongass Avenue
Ketchikan, AK 99901
ATTN: Gravina Island EIS

District Ranger;

After attending the public meeting on November 23rd and upon reviewing the Gravina Island Project published December 1999, I offer the following comments for review, realizing I might be reiterating others concerns but none the less "for the record".

The USFS is charged with the protection and administration of half of the land on Gravina. There are other entities such as DNR with approximately 5,000 acres along with the Mental Health Trust and various private owners. It is imperative and indeed mandated under 1997 TLMP that the forest service work with other Federal and state agencies on interagency reviews. I believe it is essential that the public be aware of the cumulative impacts of the decisions made by these agencies. The proposal states a harvest of 40mmbf on 1800 acres scattered about 63,000 acres delivering an illusion that this is an insignificant impact to subsistence, fish habitat, water quality, visual integrity and old growth habitat. I will contend that given the combined agency proposals, this presents monumental impacts for residents and wildlife alike. I applaud all efforts put forth in addressing this concern, however on one occasion we (the public) heard that the LTF proposed in Bostwick was preliminary and not yet decided by the USFS yet in DNR's proposal it is delivered as a given sending a very mixed message-please clarify.

Issues:

1. Roads: I am adamantly opposed to any roads being built on Gravina. Your document states that it is a island of moderate size compared to others in southeast however I would submit that it is unique and offers a control for study in contrast to those islands of equal size that have already been impacted by roading and logging.
2. Economics: your proposal segregates those issues of recreation, subsistence, water quality, visual integrity, fish habitat and economics. I believe that they are integrated and to address them separately is unwise and unrealistic. Without adequate protection of fish habitat how is our fishing industry to survive? Those throngs of tourists that flock to Southeast in order to catch "the big one" contribute a substantial amount to our local economy along with presenting a myriad of management dilemmas. I have lived in Ketchikan in an excess of twenty years and witnessed the escalation of tourism seeking the wilderness experience, if roads are permitted I predict a degradation of our environment along with such experiences. As a homeowner with a spectacular view of the Narrows and Gravina, I am concerned with the diminishing returns on my investment since realtors do consider "views" a definite factor in resale of property.
3. Timber production/industry: I recognize this also is considered under the guise of economics but it appears to be the driving force in this proposal. While not opposed to select cuts or helicopter logging I am unyielding in my belief that clearcuts serve only to provide a short term economic boon to the industry while ravaging those opportunities that may exist for present and future generations. I am also concerned with the degree to which the proposed timber sales seem to eliminate any small timber operators.
4. Log transfers in Bostwick Inlet: I have personally used this area for the many recreational opportunities the area affords, I believe any industrial grade logging would have a detrimental effect to the quality of such an experience. This agency, along with DNR has received substantial testimony as to the significant impact this would have on our native population with regards to subsistence and cultural issues. To disregard their heritage would be a tremendous

travesty.

Recognizing the aforementioned seems to be on the negative side, I would offer my vision of Gravina: A non-motorized primitive trail system carefully planned to provide an experience for those wishing to enjoy the wilderness while safeguarding against industrial grade tourism. This would be in lieu of the now proposed 25 miles of logging road. Cost would be contained since subsidizing timber extraction has historically left the forest service in the red and unable to maintain those roads already built. Promoting cottage industries as previously proposed by the Pennock-Gravina association. I would like to see the designation of the majority of lands as old growth habitat.

CT-8

I sincerely thank you for your time and consideration in this very important planning process. I look forward to participating in future planning efforts. I apologize for not attending the meeting held on January 20th, I am out of town due to a family emergency but anticipate participating in forthcoming opportunities.

Sincerely,

Susan E. Walsh
1252 Upper Millar
Ketchikan, AK 99901
Email: snbwalsh@ktn.net

Appendix B

District Ranger:
Ketchikan-Misty Fjords Ranger District
Tongass National Forest
3031 Tongass Avenue
Ketchikan, AK 99901
ATTN: Gravina Island EIS

District Ranger:

I have reviewed the Gravina Island Timber Sale Draft EIS and I would recommend Alternative 1 as the only viable option.

CT-12

The stated purpose and need regarding timber production and the need to provide suitable timber for local employment and continue to meet market demand can not be justified at this point in time. Despite a more than adequate supply, the local Gateway Forest Products Company has ceased its sawmill due to slumping markets. With ever-increasing demand for environmentally friendly wood products the viability of such harvests as proposed in Alternative 4 is questionable. This alternative does not as I previously have stated does nothing to address small timber operators.

CT-7

I submit again my letter of 2000 with a few exceptions as follows:

1. Roads: After surveying the lands surrounding the Granite Creek timber sale, an area helicopter logged I was extremely dismayed to discover a significant number of slash bundles dumped in the woods- more than likely not visible from the air. The bundles carved their way through the trees before being deposited in the woods-cable and all. I am not optimistic that other helicopter logging operations would be anymore accountable or those agencies responsible for enforcing regulations would be anymore responsible. The beach fringe of Gravina is dotted with nesting bald eagles which ones would be targeted as these bundles strike a path to the water?

CT-22

4. Log Transfers in Bostwick Inlet: I will reiterate the fact that your agency has heard compelling testimony from our native population regarding the detrimental effects the proposed timber harvests would have on their subsistence way of life. Alternative 4 blatantly disregards their testimony and failed to consider pertinent information regarding cultural sites of significant importance.

CT-3 / 4

This EIS has failed to address cumulative impacts of timber sales from possible future timber sales from Alaska Department of Natural Resources and Alaska Mental Health Trust Lands. While it might be argued that these sales are in the future, so is the projected market demand. Current prices are abysmal.

CT-14

The McDowell Group Juneau submitted a community survey in September 1990. While only 63 residents participated in this survey non-the less the highest rated values overall was the preservation of the sport fisheries (both fresh and salt water) and maintenance of

wildlife in outdoor recreation areas. I would bet my paycheck that given the survey today (with an increase in numbers) our residents would still echo this sentiment.

My concerns today are a reflection of 10,310 who in 1990 and 1991 gave input to the Tongass Land Management Plan Revision the summary of April 1992 addresses many of my same concerns. Unfortunately a decade later we are still addressing the same issues while the devastation continues and a long-term viable sustainable timber industry remains illusive due to continued over consumption and exportation of our resources. Some of the issues listed in Issue No. 6 are as follows:

CT-7

The preferred alternative gives too much priority to timber harvest

The preferred alternative provides inadequate protection for other resources-protection of cultural heritage sites and subsistence areas

CT-4

The proposed timber harvest will cause adverse effects to fish and wildlife habitat, tourism and recreation.

CT-5 / 6

Sounds all too familiar don't it? At that time industry contended that high levels of harvest could be provided while meeting other resource needs and protecting the environment. Ten years later we know differently. Fortunately the Forest Service did not concede to the industry's demand of 565 million board feet-I can not even imagine the moonscape that we would be viewing if this request had been considered-Thank you!

As a resident of the borough I resent having the Alaska Forest Association write comments for the borough assembly. This is an issue I will address with that body but one I wish this agency to consider when reviewing their comments.

Thank you for your time and consideration in this matter.

Juan E. Wals

6-25-01

PACIFIC LOG & LUMBER
P.O. Box 5183 Ketchikan, Alaska 99901
(907) 225-2692

June 12, 2001

Jerry Ingersoll
Forest Service
3031 Tongass Ave.
Ketchikan, Alaska 99901

Dear Mr. Ingersoll:

I have reviewed the draft EIS for the Gravina Island Project and support alternative 4. This timber is crucial to the continued future operations of Pacific Log & Lumber.

CT-12

PLL has made a substantial investment in it's facility on Gravina Island. We have completed the design and have funding in place to complete 3.0 miles of road extending east from our facility to a location near the west end of the airport. Senator Murkowski agreed in 2000 after review of the plans to seek funding to build the next section of road that would connect to the road we build and extend south towards the harvest area. In future years, this road will provide affordable access to recreational users of the forest residing in Ketchikan which is an important aspect that should not be over looked.

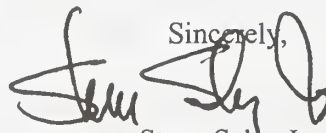
CT-6

As with all timber sales, we urge the USFS to make them as economically viable as possible by eliminating unnecessary portions of uneconomical timber. While we appreciate and need volume, it must be economically viable, even to the extent it results in a lower ASQ.

CT-7

I have review the points outlined by the Alaska Forest Association in their comment letter regarding specific issues related to spur roads and individual units and agree with their analysis.

Feel free to contact me anytime regarding questions you may have on the infrastructure that we presently have in place that may be utilized to facilitate this harvest, our need for supply or any other pertinent information that we can provide.

Sincerely,

Steve Seley Jr.
PACIFIC LOG & LUMBER

Jerry Ingersoll
 District/Monument Ranger
 Tongass National Forest
 3031 Tongass Ave
 Ketchikan, AK 99901

June 26, 2001

Re: Gravina Island Timber Sale

Dear Mr. Ingersoll:

These comments on the Gravina Island Timber Sale are on behalf of the Sitka Conservation Society (SCS). SCS was formed in 1967, and has since been continuously involved in protecting S.E. Alaska natural resources; through conservation of wildlife, fisheries, water quality, wild habitat, and the maintenance of subsistence and recreation opportunities. SCS is a membership organization with an activist board of 12 persons and a staff of four. Our members commercially fish, recreate, and subsistence gather throughout Southeast Alaska. SCS has participated in the Tongass Land Management Plan (TLMP) revision process, and in the decision making process for many for many individual projects. SCS appealed the 1997 TLMP record of decision and is currently a litigant in the case arguing that the TLMP process improperly failed to consider potential lands for wilderness designation. SCS has fought to identify and protect species threatened by extinction, and has participated in litigation to list the Queen Charlotte Goshawk as an endangered species. SCS is a member group of several environmental coalitions. We work with these other groups to share information. We support issues raised by the Juneau Group of the Sierra Club relative to timber economics and other concerns. Rather than repeat similar detail, the bulk of our comments below will focus on species viability and wilderness issues, which are focal issues for the Sitka Conservation Society.

We believe, for the reasons noted in the body of these comments, that the Forest Service must select the no-action alternative as the only appropriate choice. If this is not done then this DEIS must be withdrawn until such time as the legal issues surrounding the status of logging in roadless areas is settled. If timber harvest is then still allowed a revised DEIS will be necessary to provide the information that is lacking in the current document. Logging via helicopter methods would then do the least damage to the resource values we believe are paramount to the American people and to protection of the ecosystems at risk.

CT-12

CT-1

CT-5

Roadless Issues

The DEIS improperly dismisses roadless area concerns as not being a "significant issue" (DEIS 1-15). However, the Tongass was immediately included in the final roadless policy, and the Gravina DEIS was not available by the stipulated date in the Federal Register notice, *making the Gravina sale illegal under the roadless policy.*

CT-1

SCS comments:Gravina

1

The Bush administration has agreed to implement the roadless rule if the Idaho decision is reversed, but plans a revision process that will have unknown impacts on the Gravina sale. The Forest Service is under court order to prepare a supplemental EIS that evaluates all Tongass roadless areas, including Gravina, for their suitability as wilderness areas. *Thus, it is clearly improper and impossible to consider this timber sale or provide adequate review of the environmental impacts of the proposed actions at this time. However, one clear and severe environmental consequence would be destruction of its roadless character and loss of wilderness values. The no-action alternative must be selected.*

CT-2

The Gravina area should be evaluated and considered for designation as Wilderness. The Wilderness Act defines:

"(c) A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

According to Appendix C (p. C-196) of the Tongass Land Management Plan, "Gravina Island has a long history of subsistence and recreation use by residents of Ketchikan"... "Because the area is surrounded primarily by large saltwater channels, the natural integrity of the area is maintained... "one is not likely to meet another person with the area. There is good opportunity for primitive recreation"... "The area has limited potential for commodity and market resource management. Potential for amenity values in terms of developed recreation, fish and wildlife resources is also limited."

While the area has "constant sights and sounds of sport and commercial fishing boats, floatplanes and jets" it still is an area of undeveloped Federal land which is already heavily used for primitive and unconfined types of recreation. Since the area has limited potential for commodity and market resource management and low potential for developed amenity values, it is a natural candidate for wilderness management.

The fact that "primitive opportunities may be impacted in the future by development on the extensive State and private lands in the area (C-196)" lends even more importance to designation of this area as wilderness. The very purpose of the Wilderness Act captures this need.

"Sec. 2. (a) In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and

SCS comments:Gravina

2

protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas", and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character."

The no-action alternative must be selected to preserve the wilderness character of the area.

Wildlife Issues

Under the Singleton court decision the requirement to manage the Gravina Island timber LUDs on a 200 year rotation basis has been removed. Other requirements that affect this sale, such as road density and the amount of protected land in the Ranger District, have also changed with Singleton's decision. SCS raised many issues concerning wildlife viability and the adequacy of standards in our appeal of TLMP. We believe the 1999 TLMP ROD improved the chances for species of viability, although it did not address all of our concerns. We believe the court decision will be overturned on appeal. However, it is now difficult to review the analyses in the DEIS without confirmation that these areas will continue to be managed under the 1999 ROD, and that the rotation period will not be shortened. The decision to increase the rotation age for key wildlife analysis areas across the Tongass was made in the 1999 TLMP ROD in response to multiple appeals concerned with the inadequate protection in the 1997 ROD for deer winter range, subsistence resource protection, and other wildlife concerns. If the 200 year rotation is not to be used, then wildlife must be protected through other means.

CT-14

Therefore it was premature to release this DEIS for comments, and the no action alternative is the only possible choice.

The viability of several species is threatened by the cumulative impact of past management actions on both private and public lands, and indications that management actions will continue to be detrimental in the future.

The final record of decision (ROD) on the Tongass Land Management Plan (TLMP) contains the following weaknesses:

- *the habitat and viability analysis section is flawed scientifically, as described below*
- *management standards and guidelines are too flexible and not specific enough, and are sometimes not triggered until impacts have already occurred, and are non-existent for some problematic situations.*

Thus, we do not believe that management proposed under the 1997 or 1999 TLMP will prevent a continued decline in the viability of these species.

The following sections address some of these issues in greater detail.

Habitat protection:

The fundamental strategy on which the Forest Service (F.S.) relies in the TLMP to protect species viability is a system of habitat conservation areas (HCA's) connected by beach, estuarine, and riparian buffers. The F.S. states that these buffers will provide linkages between reserves and will assist in maintaining old growth features in the forest matrix (the area outside of reserves). Because reserve and corridor strategies are a fairly new concept in the rapidly emerging field of conservation biology, there are no extensive time studies of their effectiveness. Habitat conservation areas are a protective strategy which is largely unproven, and clearly less effective than preventing fragmentation of habitat. Yet the Forest Service is relying on this strategy, but has in the past targeted proposed HCA's for logging, and now has placed them at distances apart which are the maximum thought possible for the species dispersal abilities. The utility of corridors for wildlife dispersal has not been demonstrated (Appendix N. p. N-13, TLMP). There are no guaranteed rules on HCA size, placement, and linkages. *This uncertainty reinforces the importance of the matrix management, and cessation of practices known to be damaging.* Reliance on reserves is particularly problematic for the goshawk due to its large home-range size and high sensitivity to logging (Iverson et al. 1996; the Goshawk Assessment). The fate of the goshawk will be influenced more by management in the matrix.

CT-5

Habitat Analysis:

To assess the timber and vegetation resources of the Tongass, the USFS has relied primarily on remote sensing, especially aerial photographs. Julin and Caouette (1997) review this process and its problems. Initially, in 1978, aerial photographs were delineated into polygons of like vegetation by teams of photo-interpretors. Forest-wide, there are about 300,00 forested polygons with a mean size of about 60 acres. *Within such polygons, small stands of different species, and lower and higher volume strata often exist.* These land type map data were entered into the Tongass Geographic Information System (GIS) as the TIMTYP database in 1988-89.

Vegetation was grouped by volume classes. Classes 4-7 were considered to be of commercial timber harvest caliber. Volume class 4 ranged from 8-20 thousand board feet per acre (mbf/acre); class 5 from 20-30 mbf/acre; class 6 from 30-50 mbf/acre, and class 7 >50 mbf/acre (stands have been found with volumes greater than 100 mbf/acre but are rare today). Volume classes 6-7 historically represented about 12% of the forest, and were highly targeted during industrial clearcutting. The average volume per acre of timber harvested between 1955 and 1990 was about 41,500 mbf (USDA Forest Service 1991).

The TIMTYP database has been used by planners for estimating the allowable sale quantity (ASQ), determining volume proportionality, analyzing timber economics, and calculating wildlife habitat capability. Accuracy of the TIMTYP database was challenged in Wildlife Society and others vs. Barton, USFS (U.S. District Court for the District of Alaska 1994). The Judge ruled in favor of the Wildlife Society and others.

The Sitka Conservation Society maintains a GIS and has a Memorandum of Understanding to share data with the USFS. Our GIS staff has had extensive dialogues with the Forest Service about the accuracy and limitations of the TIMTYP database. We go into such great detail on this topic because *the database is the keystone of estimating*

SCS comments:Gravina

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old growth habitat. Yet the database methodology was focused primarily on gathering information useful for timber harvest. The scale is not fine enough to identify wildlife habitat accurately. It is not a suitable database for ecological determinations. Our concerns are echoed in the Goshawk Assessment on p.6. "Broad-scale habitat use analysis predicated on ecological features of forest stand structure, is therefore, limited by a nonecological resource inventory classification scheme and a coarse mapping resolution unable to depict the fine-scale heterogeneity characteristic of the temperate rain forest."

The Tongass is an unusual forest because it "is extremely heterogeneous. Individual habitats often occur on soil types that are less than three acres wide. Very few habitat types extend beyond a few square miles. Many wildlife species can utilize only one to five percent of the low-elevation lands. Because high-quality timberlands usually coincide with high-quality habitat especially for deer and associated species a relatively small amount of logged land can have significant impacts on regional biodiversity." (Forest Service Employees for Environmental Ethics, 1996) *Yet the vegetation database relied upon by the Forest Service is not accurate enough to delineate and protect these unique patches of high quality habitat. Because many of these stands were located in valley bottoms, they were found and targeted extensively in the beginning of the industrial clearcutting era. Such disproportionate high-grading was one of the key issues in the Wilderness Society and others Vs Barton.*

Due primarily to the 1994 court decision, the USFS revised the database. They did not gather new data, but grouped the old information in context with information about soils and slope. The new system provides for only three classes; lower volume with average volume 16 mbf/acre, middle volume of average 25 mbf/acre, and higher volume with average 35 mbf/acre. This is the volume class system used to estimate old growth habitat acreage in the new TLMP. This system reflects understanding of the effect of slope and soil wetness on productivity, and is statistically more valid, but has an *overriding drawback. Wildlife is dependent on characteristics found in the structure of ancient old-growth, often extremely high volume stands. The unique characteristics of these stands are not delineated in the broad grouping termed "higher volume".* Previously, wildlife biologists had used volume classes 6 and 7 as a surrogate for high value habitat.

The Forest Service defines productive old-growth on the basis of the ability of areas to grow trees at a rate of more than 20 cubic feet per acre per year, at least 8000 board feet/acre and at least 10% tree cover (Productive forest; TLMP, Appendix N p. N-29). Secondly, the criterion of size class 4, old growth sawtimber, 9" diameter breast height, and over 150 years old was added. This gross grouping of "productive old-growth" used in all viability analyses ignores the heterogeneity of the forest and the huge variety of habitat quality found within the forest. *Therefore, the calculations of old growth remaining after logging are not a true representation of the amount or quality of habitat remaining after logging.*

A recent report from the Pacific Northwest Research Station published in March 2000 explains this quite clearly (Caouette, et al., p.17).

"It seems that many people are dissatisfied with the revised timber volume strata because they want to see forest structure delineated and mapped for the Tongass. Any forest stratification that has timber volume as its primary objective will

necessarily group together stands of similar timber volume regardless of differences in forest structure. Our analysis showed that this is what happened in the timber stratum revision process. During this process, differences in forest structure were collapsed into a single category because they showed no significant difference in mean timber volume. Stands similar in timber volume can have a wide range of forest structures."

"If the goal is strictly to provide efficient timber volume stratification, structural information is superfluous, and one would naturally collapse the five groups (data clusters on their graph) into three, merging groups located along similar net board-foot isoclines. The revised 1997 timber volume strata (low, medium, and high POG) did just that. The collapsing of five groups into three demonstrates the problems of having a strict timber volume-based mapping objective. Although the revised timber volume strata provide significant differences in timber volume, available information, which could be useful in modeling differences in forest structure, has been sacrificed." (ibid, pp.12-14)

Problems with Viability Analyses

The Forest Service has not done a cumulative impacts analyses of the impact of all the removal of highest quality old growth forest which has been selectively targeted since the 1950's. Analyses in the plan focus on the % of current old-growth remaining after future logging, rather than considering the total percentage of old-growth lost since industrial clear-cutting began.

CT-11

Wolf Related Analyses

Wolf populations are assumed to be highly dependent on the population of their major prey, deer. Deer are an old growth dependent species, due to the importance of high volume old growth in providing winter range, especially in years of high snowfall. Under those conditions, volume classes 6 and 7 are most important. Winter range is assumed to be the limiting factor for deer populations. Deer habitat models are adequate for ranking impacts between alternatives, but are not adequate as absolute predictors of deer populations. Furthermore, the models are subject to the database limitations discussed above.

CT-18

Appendix N relies on habitat capability models and carrying capacity guidelines when it should use actual densities of deer as standards. Appendix N has mis-used numbers from the Wolf Assessment in this way. The Wolf Assessment recommended a minimum deer density of 13 deer/m² rather than carrying capacity. The carrying capacity should be given as 17 deer/m². Using the 17 deer/m², less than half of POW and Kosciusko, and less than 2/3rds of Mitkof, Kupreanof, and Kuiu will have adequate deer habitat capability (Table 3-112, TLMP FEIS). Table 8 in Appendix N (p. N-32) is not an accurate representation of deer densities. Numbers in this table represent densities in deer winter range, which is far more dense than deer populations distributed over the entire area of use.

The PNW review (Kiestler, A. and E. Eckardt, 1994) recommended that there should be no further fragmentation of existing blocks of high volume old growth. Yet

TLMP states that 16% more of the currently roadless acreage will be fragmented under the new Plan. It does not present the key analysis of how much this will affect the critical wolf habitat areas in GMU's 2 and 3.

In discussions of wolf protection, the Forest Service does not attempt to account for impacts due to increased tourism and recreation, with the possibility of associated poaching or denning disturbance. Timber operators are continuing to cut the Lab Bay Sale in North Prince of Wales, already one of the most impacted areas. The analysis never accounts for the extreme canopy closure resulting 30 or more years after the clear-cutting which has already taken place; with its consequent severe impact on deer populations foraging ability. There is no justification for assuming a linear relationship between the loss of habitat and population. The relationship is often much more severe.

Problems with Management under TLMP standards

- Clearcutting is the predominant harvest method to be used, yet wildlife biologists have consistently advocated for cutting methods which mimic natural disturbance.
- Standards and guidelines generally include the caveat "when feasible". The definition of feasible in the glossary places great weight on economic considerations.
- Stream buffers are not always wide enough and are less than recommended by the first draft EIS Option 1 or the 240' recommended by FSEEE. The Forest Service states that riparian buffers can act as corridors between reserves, yet the VPOP Response (Suring et al., 1994) states that corridors as wide as 1600' may be necessary to be utilizable.
- The 1000' beach fringe has is one of the key elements in the habitat protection strategy. But the management of the beach fringe is determined by the land use designation in which it occurs. In LUDS permitting development, unprogrammed timber harvest could be allowed, such as selective logging, salvage logging, etc (p. 4-5). Road corridors may be designated in the beach fringe when "feasible alternatives do not exist". (p.4-5) Goshawks are highly selective for the high volume old growth trees which would also be the targets of selective logging. The VPOP Response to the Pacific Northwest Station Review of the VPOP recommended a 3,300 foot no-harvest beach fringe (Suring et al. 1994).
- Goshawk nest buffers are protected, but foraging areas are not adequately protected
- The Goshawk Assessment suggests that long rotation forestry (300 yrs) and uneven-aged silvicultural management are necessary to maintain goshawk habitat. TLMP ignores these recommendations.
- Martin standards and guidelines protect den structures but do not ensure that adequate prey will remain surrounding the den.
- The standards for protection for wolf should be made more quantitative and less discretionary. The 1999 ROD improved this problem by setting a road density threshold. Under the 1997 ROD wolf have even less protection. Wolf mortality will be monitored at some unspecified level, and, if necessary, some unidentified level of road closures would be implemented as part of a Wolf Habitat Management Program. This plan would be integrated into road management objectives, but would not necessarily result in any substantive changes to road projects (1997 TLMP, 4-117) A 1200' buffer around wolf dens is "encouraged" and site specific factors need to be

considered to build a road within a 600' buffer, but no buffer zone is always required. These are not effective standards.

- The deer winter-range standard was not incorporated into the 1997 ROD. This would have provided additional habitat protection in areas where current human harvests are high in comparison to the estimated deer habitat capability. This option was urgently needed in GMU's 2 and 3, the areas of highest concern regarding wolf viability. Furthermore, consideration should have been given to future increases in human hunting pressure. It is not acceptable for the USFS to disregard or accept curtailment of human hunting. Humans will not accept curtailment, it will create political and emotional backlash against wolves, and increase illegal activities.
- The TLMP contains no concrete plan for road closure in wolf habitat. Until the Forest Service shows that they can stop human use of roads to kill wolves, it remains a road issue, and roads must be managed to prevent mortality.

Gravina Wildlife Issues in Light of TLMP management problems

Because TLMP fails to offer adequate protection to wildlife through its standards, population viability must be considered and evaluated at the project level.

Alexander Archipelago Wolf

The information contained in the DEIS suggests that there is a significant possibility that the wolf pack on Gravina Island could be lost due to the impacts associated with logging. Road density will increase, deer populations will suffer direct habitat loss impacts as well as changes in hunting pressure, small old-growth reserves do not meet habitat requirements. Conservation biology is a new and inexact science, without a long enough time frame to evaluate whether strategies like habitat reserves and corridors actually can save species. The potential elimination of wolves from Gravina Island should be taken very seriously. Furthermore, impacts on wolves and loss of wildlife viewing opportunities should be evaluated in terms of both aesthetic recreational losses, as well as economic loss to tourism guides. In Denali Park, for instance, the small Toklat wolf pack is calculated to bring in thousands of dollars in wildlife viewing, and to be one of the primary Park attractions. The Gravina pack may not be exploited currently as a tourism attraction, but with the rapidly growth in the tourism industry it soon could be.

CT-17

CT-5

CT-6

Queen Charlotte goshawk

SCS was a litigant requesting that the Queen Charlotte goshawk be listed as endangered. We have put a great deal of effort into studying current research knowledge about the goshawk. Goshawks have large home ranges in S.E. Alaska, which we believe to be a reflection of the preponderance of low value habitat in S.E. Alaska. The body of the goshawk is adapted to coarse canopy old-growth habitat conditions, to perch on snags watching for prey, and then move swiftly in abrupt twisting attack flights. In more open canopy conditions the goshawk can be outcompeted by hawks.

The Forest Service has chosen to assume that the large home ranges used by the goshawk are an example of their use of a variety of habitats. Yet the information contained in the goshawk assessment shows that the goshawks are extremely selective for very high volume stands, especially for nesting habitat, and have been forced into greater and greater home range sizes by the progressive elimination of those high volume stands

by industrial clearcutting. The goshawk is much more vulnerable to predators in the lower volume components of their home range. The Goshawk Assessment (p.37) cites studies showing a "strong pattern for selection of very high to moderately productive old-growth forest. Visual inspection of goshawk relocation points on aerial photographs indicated that the point was often in a patch of productive old-growth forest imbedded within a larger scrub forest polygon. Because of this mapping unit resolution, data may overestimate the use of scrub forest and underestimate the use of productive old-growth forest patches contained within."

Without information in the DEIS on the forest structure that will remain on Gravina following the cutting, it is difficult to evaluate the impacts. It is likely that the entire island is the home territory of one goshawk pair. Removal of the high value habitat could lead to breeding failure of that pair. Given that the total population of goshawks in S.E. Alaska is likely to be 100-200 pairs, even one pair's failure is of concern for species viability.

CT-13

CT-5

Adequacy of Old-Growth Reserves

It is of grave concern to SCS that even with the proposed changes in small old-growth reserves, none meet the preferred biological criteria for POG acres. An alternative must be developed that presents viable old-growth reserves, especially considering forest structure rather than generic POG. Adequate information is not provided in the DEIS to evaluate the proposed change of the small reserve in VCU 7650. The stated goals in the Biological evaluation are to better main connectivity with the medium Old-growth habitat reserve and to protect higher value deer winter range. However, units 86 and 105, and several other units, which are protected from harvest under the existing old-growth reserve, become unprotected under the shift. Both units 86 and 105 are described as high value martin habitat. Martin are an indicator species for old-growth habitat value.

CT-11

Silvicultural Treatments

SCS opposes the use of clearcutting due to its long term damage on other resources. Some alternative treatments to clearcutting, such as clearcutting with reserves or partial cutting, are an improvement, but still can cause habitat and resource damage. In a retrospective study of sites that were selectively logged in S.E. Alaska (Kirchoff and Thomson, 1998) it was found that plants important for deer winter food declined with increased logging intensity. "One of the key characteristics of old-growth forest is its heterogeneous structure." It was found that "as logging intensity increased, relative variation in tree diameters and crown cover decreased." The authors recommended that prescriptions should "strive to emulate natural disturbance regimes with respect to intensity, frequency, and especially scale of disturbance. On productive lowland sites where timber harvest is desired, and maintenance of deer winter range is an important objective, selection harvesting that removes small numbers of trees (<30 per ha) distributed evenly throughout the unit (1-6 trees per 0.2 ha) would probably be most effective and appropriate." Much of the cutting proposed for the Gravina project does not meet these guidelines.

CT-9

Failure to put full information from biological reports in EIS

SCS was able to obtain biological reports prepared for the Gravina project. The information from these reports was very helpful and would have more widely available had it been included directly in the EIS.

Marten

Marten are even more sensitive to road density than wolves. The road density on Gravina as proposed under some of the action alternatives will put road density at critical levels. Roads should not be built. Most of the helicopter units on the southern portion of the Gravina island are hi value martin habitat. Although partial cutting is proposed in these units, SCS is concerned that the remaining forest structure will not be adequate to protect marten habitat and prey species. An alternative should be presented that includes no logging in this area.

CT-5

Road Access

SCS does not support the construction of roads, nor leaving roads open following timber sales. With the current backlog of road maintenance necessary on the existing roads of the Tongass, no new roads should be constructed.

CT-16

Landform Type

The DEIS should present an analysis of unit location by landform type, similar to that performed in the S.E. Chichagof Landscape Analysis, in order to ascertain whether a particular landform type will be disproportionately harvested. The bulk of the units and conventional harvest are located in the valley bottom from the Bostwick Inlet drainage. The quality of wildlife habitat in this landform should be compared to that available in the old growth reserves which are much more rugged and steep in topography.

CT-5

Recreational Impacts

We do not believe the DEIS provides an adequate analysis of potential impact to recreation and tourism. We are especially concerned with potential impacts to aesthetic and tourism value in Bostwick Inlet. The extremely rapid growth in visitation, cruise ship capacity with associated day trips, etc, must be considered.

CT-6

Range of Alternatives

The range of alternatives lacks broadness, nor do they seem to accomplish their stated goals. Alternative 3 for instance, has an objective of minimizing impacts to subsistence, fish & wildlife, and scenery. It is difficult to see how this can be the case when this alternative builds almost as many miles of roads as the positive timber economic alternative (Alt 2), harvests nearly as much timber, and degrades the visual quality of more viewsheds (Table S-2) than the positive timber economics alternative. While the roads are slated to be closed following the sales in this alternative, construction of roads has serious impacts, as does the period when the roads are open and used for traffic.

CT-21

Ltf Location & Barge Drop

Bostwick Inlet is not a suitable location for an ltf, due to its recreational, tourism, and wildlife value. The ltf would require a road segment to be built to it through non-Forest Service lands. There is no analysis and no information provided on barge drops; other than the fact that multiple barge drops could be used. Helicopter noise and boat traffic associated with these drops could be extremely disruptive to wildlife and those seeking recreational solitude and wildlife viewing opportunities.

CT-3 / 19

Karst

The DEIS provides inadequate information on the location of karst. SCS members who are cavers have concerns with TLMP karst standards, and we have raised those concerns with other projects, such as our appeal of the Indian River Timber sale.

CT-24

Cumulative Impacts

The DEIS fails to devote adequate attention to the likely development that will occur on state and private lands. The viability of these species is threatened by the cumulative impact of past management actions on both private and public lands, and indications that management actions will continue to be detrimental in the future.

CT-14 / 23

Logging and habitat damage on private lands is controlled only by the inadequate Alaska State Forest Practices Act, which allows large-scale clear-cutting and provides for only a 70' foot riparian buffer in which selective logging may occur. This weak management has resulted in extensive habitat damage and fragmentation. Future damage will continue on private lands under this management. We regard this damage as significant, and a factor which must be evaluated in combination with habitat damage on public lands.

In conclusion SCS believes that the Forest Service must select the no-action alternative as the only appropriate choice. If this is not done then this DEIS must be withdrawn until such time as the legal issues surrounding the status of logging in roadless areas is settled. If timber harvest is then still allowed a revised DEIS will be necessary to provide the information that is lacking in the current document. Logging via helicopter methods would then do the least damage to the resource values we believe are paramount to the American people and to protection of the ecosystems at risk.

Sincerely,

Page V. Else

Page Else, GIS Analyst



Southeast Alaska Conservation Council

SEACC 419 6th Street, Suite 328, Juneau, AK 99801

(907) 586-6942 phone (907) 463-3312 fax

info@seacc.org

June 26, 2001

Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Ave.
Ketchikan, AK 99901

Re: Comments on Gravina Timber Sale DEIS

SENT VIA FAX AND MAIL

Dear Mr. Ingersoll:

The following comments are submitted on behalf of the Southeast Alaska Conservation Council (SEACC) and our Ketchikan member group, Tongass Conservation Council (TCS), on the Gravina Timber Sale Draft Environmental Impact Statement (DEIS). This project proposes to log approximately 37 MMBF of timber from 2,218 acres of National Forest, and construct about 22 miles of new roads on Gravina Island. One new log dump, use of an existing log dump, and an unknown number of barges are proposed in the project area. The action alternatives would destroy important roadless characteristics in the Gravina Roadless Area, and seriously threaten the cultural and biological resources used for subsistence fishing, hunting and gathering in the proposed sale area.

SEACC is a coalition of eighteen volunteer conservation groups in fourteen communities across Southeast Alaska, from Yakutat to Ketchikan, including the Tongass Conservation Society. SEACC's individual members include Alaska Natives, subsistence users, commercial and sport fishermen, hunters and guides, tourism and recreation business owners, small timber operators and high value-added wood product manufacturers, as well as sale area residents and businesses. SEACC is dedicated to safeguarding the integrity of Southeast Alaska's unsurpassed natural environment while providing for balanced, sustainable use of our region's resources.

GRAVINA TIMBER SALE PRESUPPOSES RESOLUTION TO ROADLESS & TLMP LAWSUITS

The DEIS fails to identify maintaining the roadless characteristics of the Gravina Project Area as a significant issue for the proposed timber sale, or that this project involves unresolved conflicts concerning alternative uses of available resources (DEIS 1-14, 1-15). The decision to include the Tongass National Forest in the National Roadless Rule was one of the most hotly debated aspects of the Roadless Rule NEPA process. In fact, because the pressure to both conserve and

CT-1

ALASKA SOCIETY OF AMERICAN FOREST DWELLERS, Point Baker • ALASKANS FOR JUNEAU • CHICHAGOF CONSERVATION COUNCIL, Tenakee
FRIENDS OF BERNERS BAY, Juneau • FRIENDS OF GLACIER BAY, Gustavus • JUNEAU GROUP SIERRA CLUB • LOWER CHATHAM CONSERVATION
SOCIETY, Port Alexander • LYNN CANAL CONSERVATION, Haines • NARROWS CONSERVATION COALITION, Petersburg • PELICAN FORESTRY
COUNCIL • PRINCE OF WALES CONSERVATION LEAGUE, Craig • SITKA CONSERVATION SOCIETY • TONGASS CONSERVATION SOCIETY, Ketchikan
TAKU CONSERVATION SOCIETY, Juneau • WRANGELL RESOURCE COUNCIL • YAKUTAT RESOURCE CONSERVATION COUNCIL

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develop the Tongass dominated the process, the Roadless Rule's Tongass-specific provision allowed timber sales in Tongass roadless areas to proceed if a notice of availability of a draft environmental impact statement (DEIS) had been published prior to January 12, 2001. The Notice of Availability for the Gravina timber sale project was published on January 19, 2001 (66 Fed. Reg. 5514). The Gravina timber sale is, therefore, fully subject to the roadless rule.

CT-1

Although implementation of the Roadless Rule is currently enjoined, none of the court cases have reached closure, and the ultimate fate of the Roadless Rule is unclear. Given the expedited schedule provided for appeals of the injunction issued by the federal district court in Idaho, changes to the status of the Rule in the near term are both reasonable and foreseeable. If the Roadless Rule is upheld, then the Gravina timber sale is illegal. Given the low market demand for Tongass timber, and the ever-increasing value of Tongass roadless wildlands for other uses, including subsistence and recreation, we oppose timber sales affecting Tongass roadless wildlands. Therefore, the no-action alternative is the only alternative proposed for this sale that we can support.

CT-12

On March 30, 2001, an Alaska federal district court invalidated the final 1999 Tongass Land Management Plan (TLMP), which had tried to resolve the 33 administrative appeals of the earlier 1997 TLMP decision. At the same time, the judge found that the Forest Service had inadequately considered wilderness eligibility for Tongass wildlands during the TLMP revision planning process. The court ordered the Forest Service to prepare a supplement to the final environmental impact statement (SEIS) to address changes adopted in the final TLMP decision and to consider possible wilderness recommendations to Congress. The court further enjoined the Forest Service from taking any action that could change the wilderness character of any eligible roadless areas pending completion of the SEIS.

The Alaska federal district court decision further affects the Gravina timber sale because it requires the Forest Service to conduct a Tongass wilderness evaluation, which includes the roadless portion of Gravina Island. By vacating the 1999 TLMP, the Alaska federal court decision also removed protections imposed by that decision on adjacent areas with extremely high habitat and subsistence values, such as the Cleveland Peninsula. With protective land use designations (LUDs) stripped away from these nearby high value forestlands, as well as changes to management prescriptions applicable to the Gravina Project Area, the Forest Service must reevaluate and disclose the specific and cumulative impacts from these changes to the long-term availability of high volume productive old growth (HVPOG), the wildlife habitat conservation strategy, subsistence use of forest resources, and recreation. This analysis should consider effects at both the local level and within the Revilla Island/Cleveland Peninsula biogeography province.

CT-2

CT-11

Although the development injunction has been temporarily suspended, the legal process is far from complete. Regardless of the ultimate fate of the injunction, the final judgment issued by the Alaska District Court stands, and the Forest Service must properly evaluate and consider whether to recommend roadless areas within the Tongass, including the Gravina Project Area, for potential wilderness areas. Pending completion of the supplemental TLMP planning process, CEQ regulations (40 C.F.R. 1506.1) prohibit the Forest Service from taking any actions that prejudice the selection of eligible roadless areas for wilderness recommendations or limits the range of alternatives the Forest Service can consider in that process.

CT-2

Appendix B

THE DEIS FAILS TO EVALUATE A REASONABLE RANGE OF ALTERNATIVES.

The Purpose and Need statement indicates the agency desire to manage the project area to provide for (1) economically efficient logging; (2) a timber supply to meet market demand and the planning cycle; (3) a diverse range of resource uses that contribute to the local and regional economies of Southeast Alaska; and (4) a wide range of natural resource employment opportunities.

NEPA requires that the Forest Service consider a reasonable range of alternatives for this proposed timber sale. See 40 C.F.R. § 1502.14(a). Four action alternatives were proposed to meet the stated purpose and need for this project. Unfortunately, the agency only considered action alternatives that contemplated logging volumes of either 32, 31, 37, or 12 mmbf, and treated the no-action alternative primarily as a benchmark. Alternative 5, the alternative that relies extensively on helicopter yarding to access the 12 mmbf, is unreasonable because is not economically viable and therefore does not meet the purpose and need for the project. Alternative 3 was purportedly developed to respond to subsistence concerns for the tideland resources of Bostwick Inlet and the island's deer populations. The agency did not, however, even evaluate the tideland uses, and does not address access and hunter competition in Alternative 3. Further Alternative 3 is more expensive to log, and so is not economically viable. Both Alternatives 3 and 5 are "straw alternatives", and will not be chosen. Given the agency's clear intent to high-grade the most valuable timber stands from this project area in the first entry, the agency's reliance on these "straw" alternatives violates NEPA because it constrains the decision-maker's into selecting either Alternative 2 or 4.

CT-21

The Forest Service violated NEPA by not developing a reasonable alternative that responded to unresolved conflicts, concerning alternative uses of the resources in this valuable area. 40 C.F.R. § 1501.2(c). This project not only involves unresolved conflicts about roading in a roadless area on the Tongass included in the final roadless rule, but the proposal to sacrifice existing and long-term uses of the project area's resources for the short-term benefit associated with logging old-growth. So instead of using this DEIS to make an important contribution to the decision-making process, the Forest Service has only evaluated a range of alternatives in this DEIS that were designed to justify decisions already made – cut the most valuable timber stands in the project area now regardless of adverse impacts to Gravina wildlife populations and local subsistence uses.

CT-21

Another problem with the range of alternatives considered in the DEIS, is that the Forest Service does not propose an alternative that addresses the disproportionate impacts of all the action alternatives on the community of Metlakatla, as required by Executive Order 12898. With Metlakatla mills shut down and the community's economic base diversifying, the Forest Service needs to explain how the no-action alternative will disproportionately impact Metlakatla.

CT-22

THE DEIS FAILS TO ADEQUATELY DISCLOSE AND EVALUATE CUMULATIVE & CONNECTED IMPACTS

There are many past, present, and reasonably foreseeable significant actions proposed on Gravina Island. Thirty-six percent of Gravina is under non-Forest Service ownership (DEIS S-3), and the DEIS indicates that the Forest Service consulted with the governmental groups who have development plans for their land on Gravina, including the Ketchikan Gateway Borough, Ketchikan Working Group, Alaska Mental Health Trust, and Ketchikan Chamber of Commerce. (DEIS 1-10) The DEIS lists the plans of other agencies, including Alaska Department of Natural Resources, Alaska Mental Health Trust, University of Alaska, and the Ketchikan Gateway Borough. (DEIS 3-4) Two out of the three road proposals link Forest Service roads to the existing road matrix on Gravina Island. Three out of five Gravina timber sale alternatives allow for extensive road building, and have the potential to open up the center of the island to intensive use. In order to satisfy NEPA, an EIS must evaluate in detail the "cumulative effects of a proposed action with other proposed actions." See Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d (9th Cir 1999). The agency must analyze of cumulative and similar actions affecting lands within or adjacent to the Gravina timber sale project area. These include Gravina Access project, the Wetlands Inventory, the Ketchikan 2020, the Airport Expansion/Master Plan, the Alaska Mental Health Trust Lands Plan, the Comprehensive Plan, and current actions proposed for state lands pursuant to the Central/Southern Southeast Area Plan. Private landowners hold title to lands in Vallenar Bay, Bostwick Inlet, and along Tongass Narrows, yet the DEIS does not disclose or evaluate their development plans, nor does it evaluate how they might impact resources in the project area.

CT-14

The DEIS references proposed development on land under other ownership throughout the DEIS, yet fails to include these cumulative or connected actions within the scope of this DEIS. Nowhere in the DEIS does the Forest Service take a hard look at the effects from past, present, and reasonably foreseeable future logging to forest resources in the Gravina area and the users of those resources. Given the extent of logging and road building throughout the areas surrounding the project area, the Gravina sale must also be evaluated in its impacts to regional habitat contiguity, subsistence uses, forest-wide species diversity, and other large-scale concerns. Without such an analysis, the DEIS violates NEPA.

In discussing the proposed timber sale, the DEIS must fully disclose analysis of how the direct and secondary impacts of each reasonably foreseeable action will affect:

- Deer habitat and population viability;
- Wolf populations;
- Threatened, endangered and sensitive species;
- Wetlands;
- Watersheds and fisheries;
- Aquatic resources;
- Road building and access;
- Recreation opportunities; and
- Subsistence hunting, fishing and gathering.

Appendix B

Given the scale and broad application of the other management proposals, the Forest Service's proposed timber sale and road building is inextricably linked with private, state and Borough development plans. The proposals listed above will not happen as currently proposed without the construction of the logging roads contemplated in this project's action alternatives. CEQ regulations define connected actions as actions that "cannot or will not proceed unless other actions are taken previously or simultaneously." 40 C.F.R. § 1508.25(a)(1)(ii). CEQ regulations require that connected actions be considered in the same environmental review process. Piecemeal decision-making, first by the Forest Service and then by Mental Health, the Ketchikan-Gateway Borough, the state and other stakeholders, will not serve the public's interest or satisfy NEPA's requirements.

Artificially limiting the scope of the DEIS to the Forest Service's proposed timber sale prevents the agency from educating itself and others about the larger context in which decisions affecting the spectacular environment of Gravina Island are being made, thereby limiting the effectiveness of the NEPA process. Limiting the scope of this EIS is inconsistent with the purpose, goals, and procedures of NEPA. The failure to take a look at the cumulative impacts that the actual proposed projects on Gravina Island might have on the resources and uses prevents this DEIS from contributing to the quality of the agency's decision, in violation of the goals and "action-forcing" purpose of NEPA. See 40 C.F.R. §§ 1500.2(c), 1501.2, 1502.2, and 1502.5.

Rather than using the NEPA process for the proposed Gravina timber sale to collect and analyze important resource inventories for the entire Gravina Island, the Forest Service stayed focused on just a single piece of this ecological puzzle. The Forest Service thereby violated NEPA by failing to "initiate and utilize ecological information in the planning and development of resource-oriented projects." See 42 U.S.C. § 4332(2)(H). In order to fulfill its responsibility as "trustee of the environment for succeeding generations," 42 U.S.C. § 4331(b)(1), the Forest Service was obliged to collect and analyze comprehensive and accurate resource inventories for the entire Gravina Island area, which is almost entirely under Forest Service jurisdiction. This was not done. Such leadership would have fulfilled the Forest Service's responsibility under NEPA to encourage and facilitate informed agency and public review of the Gravina timber sale and other actual proposed projects that will have cumulatively significant impacts on the quality of the Gravina Island environment. In fact, the Forest Service's lack of response to scoping requests for complete disclosure of connected and cumulative analysis suggest that this NEPA process served little purpose other than improperly justifying a decision already made. See 40 C.F.R. § 1502.5. This is not a reasonable response to a responsible request, provides absolutely no explanation for the agency's conclusion not to give this serious issue appropriate consideration in the DEIS, or explain why further agency response was undeserved. See 40 C.F.R. § 1503.4(a).

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IMPACT ANALYSES FOR PROPOSED ROADS ARE INCOMPLETE.

The DEIS proposes building up to 22.6 miles of new roads. Though the proposed roads in Alternative 2 do not directly connect with the Airport road system, they would be accessible by water. In Alternatives 3 and 4, all proposed roads would also be accessible from the Airport roads. Gravina Island subsistence users are very concerned about increased access to, and pressure on resources that roads will bring. The DEIS does not address how the Forest Service

will prevent non-motorized access to local resources, enforce motorized access restrictions and access violations, or how the agency proposes to exclude traffic from roads during the project operating years, or prevent workers from competing with subsistence users for area deer and other resources.

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In the environmental consequences portion of the transportation section, the DEIS lists access management options and reasons why roads may be closed, but fails to analyze and disclose benefits, problems, and risks associated with new road building, and roads maintenance. *Roads Analysis: Informing Decision About Managing the National Forest Transportation System* (FS-643, USFS, August 1999) lists topics to evaluate assessing benefits and risks of roading, including (1) ecosystem function and processes, (2) aquatic riparian zone, and water quality, (3) terrestrial wildlife, (4) recreation, (5) social issues, and (6) civil rights and environmental justice. Although the DEIS claims to have conducted a Roads Analysis Process (DEIS 3-31), it is difficult to determine the answers to the following questions. Please provide answers to:

- ☐ How and where does the road system modify the surface and subsurface hydrology of the area?
- ☐ How and where does the road system generate surface erosion?
- ☐ How and where does the road system affect mass wasting?
- ☐ How and where do the road-stream crossings influence local stream channels and water quality?
- ☐ How and where does the road system create potential for pollutants, such as chemical spills, oils, de-icing salts, or herbicides, to enter surface waters?
- ☐ How and where is the road system "hydrologically connected" to the stream system? How do the connections affect water quality and quantity (such as, the delivery of sediments and chemicals, thermal increase, elevated peak flows)?
- ☐ What downstream beneficial uses of water exist in the area? What changes in uses and demand are expected over time? How are they affected or put at risk by road-derived pollutants?
- ☐ How does the road system alter physical channel dynamics, including isolation of floodplains; constraints on channel migration; and the movement of large wood, fine organic matter, and sediment?
- ☐ The Forest Service recently reported that logging road culverts on less one-eighth of all anadromous streams and less than one-tenth of all resident fish streams meet fish passage standards. Alaska Department of Fish & Game further determined that 66% of anadromous fish stream crossings, and 85% of resident fish stream crossings are not adequate for fish passage. How and where does the road system contribute to fishing, poaching, or direct habitat loss for aquatic species?
- ☐ What are the direct effects of the road system on terrestrial species habitat?
- ☐ How does the road system facilitate human activities that affect habitat?
- ☐ How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels?) What are the effects of wildlife species?
- ☐ Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

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- ❑ What are the adverse affects of noise and other disturbances caused by developing, using, and maintaining roads, on the quantity, quality, or type of unroaded recreation opportunities?
- ❑ Who participates in unroaded recreation in the areas affected by constructing, maintaining, and decommissioning roads?
- ❑ What are these participants' attachment to the area, how strong are their feelings, and are alternative opportunities and locations available?
- ❑ Do areas planned for road construction, closure, or decommissioning have unique physical biological characteristics, such as unique natural features and threatened or endangered species?
- ❑ Do areas planned for road construction, closure, or decommissioning have unique cultural, traditional, symbolic, sacred, spiritual, or religious significance?
- ❑ How does the road system affect cultural and traditional uses and treaty rights?
- ❑ How docs road management affect people's sense of place?
- ❑ How does the road system, or its management, affect certain groups of people (minority, ethnic, cultural, racial, disable, and low-income groups)?

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If the Gravina sale proposes to build permanent roads and retain them in any status for any subsequent type of use after finishing the proposed Gravina sale, the Forest Service must fully analyze the cumulative effects from this choice now, because this sale decision could establish the infrastructure for subsequent entries into, or community use of the project area. Future salvage logging and forest health management options in the project area are retained for the project area. (DEIS 3-12) Therefore, the agency must treat all future road building, maintenance, and usage activities as reasonably foreseeable and document the cumulative impacts to the forest resources from that level of development.

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THE DEIS FAILS TO FOLLOW THE RECOMMENDATIONS OF THE ANADROMOUS FISH HABITAT ASSESSMENT (AFHA) BY FAILING TO CONDUCT A WATERSHED ANALYSIS.

The Gravina project area contains important anadromous and resident fish streams. These streams are home to coho, chum, and pink salmon, as well as Dolly Varden char. Other than a general sense of which alternatives will have more impact on fisheries and other watershed functions, the effects analysis presented in the DEIS provides very little site-specific analysis of the effects of various alternatives on fisheries and other watershed functions. In fact, the entire watersheds and fisheries section is merely encyclopedic. The DEIS includes very little data, hydrological systems analysis, or substantiated analysis of impacts from the proposed timber sale.

CT-5

In order to give decision makers and the public an understanding of the site-specific effects of various alternatives, the agency must complete and disclose a cumulative watershed effects analysis, as recommended by AFHA. (See SEACC's Gravina timber sale scoping comments for a full discussion. May 25, 2000) AFHA experts concluded that conducting watershed analysis at the front-end of project planning would provide the Forest Service with essential information necessary to adequately protect fish habitat and watershed functions, and updating important

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resource inventories in a timely manner. *AFHA Report Synthesis at 34*. The DEIS for this timber sale, however, fails to include an adequate watershed analyses and thus fails to ensure that fish habitat and watershed functions will be protected. AFHA viewed watershed analysis as playing a critical role in providing the essential information needed for implementing the Revised Tongass Plan at the project level. (APHA, Appendix C, at 38) While standards and guidelines may serve to define scope of allowable action, they are no substitute for research and analysis at the watershed level. If the Forest Service had done and disclosed comparative watershed analyses, then it wouldn't have to rely on imprecise "rules-of-thumb" to determine the effects of proposed actions. Such analyses in the DEIS would also provide the public with an adequate assessment of the impacts of proposed activities on the watersheds.

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THE FOREST SERVICE MUST COMPLY WITH EXECUTIVE ORDER 11990.

Executive Order 11990 prohibits construction in wetlands where practicable alternatives exist and requires that "all practicable measures" be implemented to minimize harm to wetlands. According to the DEIS, roughly 70% of the proposed Gravina timber sale area is on wetlands. Sale activities will impact between 684, 684, 781, and 221 acres of wetlands under Alternatives 2-5, consecutively. (DEIS at 3-88-89).

Estuarine wetlands in the project area are extremely important for their relative rarity and ecological importance. Altered water flow and changes in sedimentation from logging and road building will adversely impact Gravina's wetland systems. The DEIS notes the value of these wetlands and contains broad generalizations and vague references to ways to minimize harm in road building. This does not constitute the level of detail necessary to take a "hard look" at the mitigation measures and their affects in the proposed project area.

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The DEIS further fails to declare whether the construction of new log dump in Bostwick will impact wetlands. Given that the log dump would be constructed in the intertidal zone, we must assume that some wetlands will be affected. If any wetlands will be affected by the log dump, the Forest Service must choose an alternative which doesn't require a new log dump, or that documents how the chosen alternative adequately minimizes adverse impacts.

THE DEIS MUST FULLY ANALYZE ALTERNATIVES TO LOG DUMPS, AND DOCUMENT IMPACTS OF LOG DUMP SITINGS.

In addressing log transportation, the Gravina DEIS only purports to consider the number and placement of log dumps. Seven log dump sites were considered in the project area, two of which were discussed in the DEIS. Other than describing the two log dump locations, the DEIS does not disclose any information about the log dump sites. The Tongass Narrows log dump has been in operation for years, yet the DEIS did not disclose the dive survey findings, or include any site-specific analysis. How deep is the existing bark accumulation? What is the area already covered in the existing zone of deposit? Seafood processors have recently been fined for polluting portions of the Tongass Narrows. Where is the log dump relative to these fouled waters? How will further benthic accumulation affect invertebrate populations and the proportion of dissolved

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oxygen in the water? The DEIS must include hard data on the effects of bark accumulation and the effects on marine and benthic organisms.

Bostwick Inlet subsistence users have repeatedly told the Forest Service that the proposed log dump or barge in the Bostwick area will have a major impact on subsistence that would affect hunting, fishing, and gathering in the area. Ketchikan Indian Corporation has further stated that they "do not want to see a log transfer facility, barge drop, or logging road in Bostwick." (Letter from KIC Tribal Council to Susan Marthaller, Timber Sale NEPA Coordinator. November 21, 2000) The DEIS must fully disclose each of the seven sites that were considered and why five were eliminated. The Forest Service must also explain how the agency selected among the alternative log dump sites.

CT-3

Alternative 5 proscribes helicopter logging and barge transfer. The DEIS, however, does not contain any information about how many barges will be used, where the barges will be anchored, and nor does it analyze the impacts to tideland and marine resources. Without such data and impacts analysis, important effects may be overlooked or underestimated, and only discovered after resources have been committed.

The DEIS includes no real analysis of different transfer options, such as other alternatives to log dumps. Practicable alternatives exist, and facility design proposals, such as Steve Seley's temporary log transfer facility, are available to completely avoid in-water dumping, rafting, and discharge from logs in addition to minimizing the footprint of necessary structures. See Pacific Log & Lumber, Log Transfer Facility Proposal (May 19, 2000)(attached). Is it feasible to build a low-profile, temporarily placed shot rock barge bulkhead for direct land-to-barge log transfer? The DEIS failed to consider either the costs or benefits associated with these alternatives.

Furthermore, although the DEIS identifies the location of the proposed log dump facilities, no information is provided about the need for, location, or duration of use of upland sortyards and in-water log rafting and storage areas. Without this information, local residents are left uninformed about the potential impacts of storage sites or sortyards to their existing uses of the proposed project area and adjacent marine waters.

CT-19

In order to qualify for a variance from anti-degradation requirements and water quality criteria, the Forest Service must disclose sufficient evidence to support a finding that "allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located" and that "the resulting water quality will be adequate to fully protect existing uses." See 18 AAC 70.015(a)(2)(A)&(C). This submission is also essential to support the Forest Service's finding that this project is consistent to the maximum extent practicable with the Alaska Coastal Zone Management Plan. The DEIS must provide sufficient information and analysis to support these required findings.

Finally, given the significant degradation to marine resources associated with bark and other woody debris accumulation, and the impact to existing uses of these marine waters, it is not in the public interest to construct and operate log dumps in the Gravina area as proposed in the DEIS. The Forest Service has failed to show that existing uses of the affected waters will be fully protected or that the use of these waters for log dumping is necessary to accommodate important economic development as required by Alaska's antidegradation policy. See 18 AAC 70.015. In

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fact, as proposed, these log dumps will have persistent and serious adverse effects on the aquatic environment and result in significant adverse impacts to existing uses of these waters for commercial, sport and subsistence uses.

CUTTING ON "SOME SLOPES OVER 72%" VIOLATES THE FOREST PLAN

The Forest Plan recognizes the importance of protecting the integrity of soil and water in the region. In the Standards and Guidelines for Soil and Water, TLMP states the Forest Service will "plan and conduct land use activities to avoid irreversible or serious and adverse effects on soil and water resources." TLMP, S&W112.I.A.

According to TLMP, in order to achieve this standard the Forest Service must "evaluate soil stability, potential soil mass wasting effects, and stability of class IV channel systems. At the forest plan level, slope gradients of 72% or more are removed from the tentatively suitable timber base due to high risk of soil mass movement and accelerated erosion of class IV channel systems." TLMP, S&W112.I.A.5. This TLMP standard goes on to provide that cutting may be approved at the project planning level on slopes greater than 72% "on a case by case basis, based upon the results of an on-site analysis of slope and class IV channel stability and an assessment of potential impacts of accelerated erosion on downslope and downstream fish habitat, other beneficial uses of water, and other resources." The Tongass Plan Implementation Team's (TPIT) August 1998 clarification of this TLMP standard and guideline unambiguously lists the factors that must be analyzed in deciding whether to allow such harvest. These factors include: steepness, dissection, parent material, drainage, and potential impacts on downstream beneficial users.

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The Gravina DEIS provides insufficient analysis or justification for proposing as much as 9%-11% of the logging come from slopes exceeding 72%. Though stating that "the use of BMPs and no disturbance buffers would make it very unlikely that landslide sediments would be delivered from harvest units to the stream system" (DEIS 3-83), the DEIS doesn't even hint at the information necessary for the Forest Supervisor or District Ranger to make a "case by case" decision as required by TLMP. This incomplete and superficial analysis fails to satisfy the explicit requirements of the TLMP, as clarified by the TPIT.

SUBSISTENCE USES ARE NOT ADEQUATELY REPRESENTED AND IMPACTS TO RESOURCES ARE NOT ADEQUATELY DISCLOSED IN THE DEIS

When, as here, the Forest Service concludes that a timber sale may significantly restrict subsistence uses, Section 810 of ANILCA requires the agency to evaluate the effects, the availability of other lands, and other alternatives "which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes." Before proceeding with the action, ANILCA further requires the Forest Service to give notice to affected communities, hold public hearings, and make several explicit determinations. These determinations require that the competing values in question be informedly and rationally evaluated. With respect to Gravina Island, we have generations of cultural and social dependence

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on the valuable marine and upland resources available in Bostwick Inlet and surrounding lands by residents of Metlakatla, Saxman, and Ketchikan, versus the relatively short-term and immediate value of logging and roading presented by this proposed timber sale. Alaska's Department of Fish and Game rated Gravina Island subsistence activities as most sensitive to disturbance. (Tongass Resource Assessment. ADF&G. 1998) The Forest Service's responsibility, however, can not be satisfied by showing a knowledge of the consequences and then simply deciding to ignore them.

In addition to the clear errors in the DEIS, the document lacks enough information for affected rural residents to identify and fully understand the impacts of all proposed activities on area resources used for customary and traditional subsistence uses. Sale area subsistence users have been working with the Forest Service, in good faith, to try and protect their existing subsistence uses. After three years of letters, conversations, resolutions, meetings, a public hearing and other participation in the EIS process, the lack of detailed data in the DEIS about the economic, health, and cultural values of the upland and tideland subsistence uses is appalling. Misrepresentation of the degree of subsistence reliance and importance to cultural integrity clearly violates the NEPA requirement to take a hard look at the affected environment and the direct and indirect effects of the DEIS alternatives. See 40 CFR §§1502.15, 1502.16.

CT-15

The Forest Service reliance on the cumulative effects analysis conducted for the TLMP Revision is also misplaced. First of all, to satisfy NEPA's "hard look" requirement, the Forest Service must provide sufficient detail in its analysis to make it useful in the decision-making process and the implementation of the final decision. The broad generalizations, vague references, and lack of specific detailed information in the Gravina DEIS do not satisfy this primary objective of NEPA. For example, TLMP primarily considered the cumulative effects of actions taken on national forest lands. However, as noted above, the scope of actions and impacts that should have been fully considered in this DEIS include the actually proposed development of lands and resources belonging to the Borough, Mental Health Trust, and State of Alaska's Department of Natural Resources. Though the DEIS only evaluated rural subsistence use under ANILCA 810, Ketchikan residents also hunt Gravina deer. Alternative 3, dubbed the subsistence alternative, plans to develop an extensive road system. Increased access to deer and other subsistence resources, due to road access, will directly impact existing subsistence uses. Hunting pressure on Gravina is likely to increase exponentially because favorite hunting areas, such as the Cleveland Peninsula, are no longer protected and will likely be logged in the coming years. Deer populations on Prince of Wales are expected to fall dramatically within a relatively short period of time (personal communication with ADF&G biologist, Dave Person, June 4, 2001), and some Prince of Wales hunters will likely hunt on Gravina. Because neither TLMP or the Gravina DEIS provide a useful analysis that describes in detail the specific effects of past, present and future projects on the subsistence resources and uses on Gravina Island, the DEIS violates both NEPA and ANILCA.

CT-14

Secondly, even if the Forest Service had properly tiered to the cumulative effects analysis in the TLMP Revision, the information included in the DEIS and project resource reports suggest a substantial discrepancy between deer habitat capability losses estimated in TLMP for the Wildlife Analysis Area in this project area and those predicted in the DEIS. For Alternative 11 (the closest to the 1997 ROD), TLMP estimated that the current habitat capability on Gravina (as

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compared to 1954) was 97% and that the cumulative effects of timber production activities on estimated deer habitat capability over the rotation (until 2095) would reduce habitat capability another 4% to 93%. See TLMP, Table 3-110 at p.3-371. The Gravina DEIS (Table 3-37, at p. 3-108), however, projects a cumulative reduction in deer habitat capability for the action alternatives ranging from a minimum of 4.5% (Altern. 5) to 10.3% (Altern. 4). Consequently, it appears that the loss of deer habitat capability that results from cutting anywhere from 12 to 33 percent of the suitable timber base in this 1st entry (DEIS, Table 3-8 at p.3-18) will exceed the level predicted by TLMP for the entire rotation. This substantial discrepancy critically undermines the agency's reliance upon TLMP for evaluating the cumulative impacts to subsistence use of deer from this proposed sale. It also raises serious questions concerning the reasonableness of the agency's conclusion that it could adopt a forest-wide wildlife habitat conservation strategy that fell far short of meeting the recommendations from local and national wildlife experts who had reviewed it. Furthermore, even this significant and unpredicted decline in habitat capability underestimates the total cumulative effect of this project, when effects from other connected, cumulative, and similar actions are included. As the DEIS explains (at p. 3-126):

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"... Forest Plan projections of hunter demand for timber were based solely on projected increases in human population; they did not account for changes in access. Therefore, increases in demand (and competition between rural and non-rural hunters) could be much greater than predicted in the Forest Plan because of the proposed hard link between Ketchikan and Gravina, and if Ketchikan hunters are at some time restricted from harvesting deer on Prince of Wales Island."

In the DEIS, the Forest Service uses the deer habitat model to determine deer abundance. According to ADF&G, the model only applies to habitat capability, and habitat value data cannot be extrapolated to derive deer population data. (Personal communication with ADF&G biologist, Dave Person. June 4, 2001) The DEIS does not, therefore, contain any relevant analysis on existing subsistence opportunities, or impacts from the proposed roading and logging. Furthermore, the DEIS admits that hunter surveys severely underestimate rural subsistence hunting on Gravina. (DEIS 3-124) The DEIS must include realistic estimates of existing and potential subsistence deer hunting. Rather than stating that the community of Metlakatla gets 75% of their deer from Gravina then calculating that Metlakatla only consumes 10 deer per year, the Forest Service should estimate pounds of meat consumed per person, and then divide by the weight of the useable meat from an average sized Gravina deer. Existing subsistence uses are too important to justify the lack of credible analysis in the DEIS.

CT-15

The agency unreasonably relies (DEIS at p. 3-124) on the programmatic analysis in revised TLMP to justify not making a detailed analysis of impacts to salmon, finfish, Dungeness crabs, clams, mussels, kelp and herring roe in this project-level DEIS. The generalized analysis of impacts to fishery resources, including vague references to mitigation measures and incomplete analysis of slope stability, fail to satisfy NEPA or TLMP's standards and guidelines. The failure to specifically describe and analyze each proposed log dump site, and their effect on marine resources and existing uses of those resources, fails to provide the decision-maker and the public with the detailed information necessary for a reasoned discussion and evaluation of the impacts from the various alternatives as required by NEPA and ANILCA. No explanation is provided as

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to why the results of dive surveys conducted for the Forest Service by the U.S. Fish and Wildlife Service were not analyzed in the DEIS. For example, the Fish and Wildlife's underwater investigation conducted for the proposed Bostwick Inlet log dump revealed that this site does not meet the siting guidelines imposed by EPA's general NPDES permit for log dumps, AK-G70-1000, nor is it ideal for a barge-style facility. We could find no discussion in the DEIS of the impacts to marine subsistence resources or their use from the large amount of fill necessary in the intertidal zone to build a barge-style facility. Furthermore, the Gravina timber sale is inconsistent with the Southern Southeast Area Plan, which designates Bostwick Inlet (KT-32) for Habitat and Harvest as the primary use of the tidelands to protect community harvest areas. The proposed action for the upland resources is inconsistent with the Habitat and Harvest designation, and thus conflicts with ACMP and Area Plan standards for these important tidelands.

DEIS FAILS TO DISCLOSE CRITICAL DATA ON HABITAT STRUCTURE OR PROPERLY ANALYZE THE RESULTING RESOURCE IMPACTS.

SEACC has long been concerned about the Forest Service's practice of targeting the highest volume stands that are the heart of the rainforest. See *Ghost Trees: Measuring the Vanished Forests of Southeast Alaska* (attached); Letter from Kirsch, SEACC to Puchlerz, Tongass Forest Supervisor (Feb. 22, 2001) (SEACC's response to Forest Service's Critique of *Ghost Trees*) (attached). This practice of high-grading, or mining, the most valuable old-growth is short-sighted and destructive. Though past logging in much of the Ketchikan Ranger District has targeted a disproportionate amount of the high-value stands, this DEIS does not include data to determine ratio of highgrading.

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The DEIS relies on a yield class model (high, medium, low), which, according to peer reviewed literature, does not relate to forest structure and does not provide sufficient data to analyze effects to forest resources. (See *Deconstructing the Timber Volume Paradigm in Management of the Tongass National Forest*. Caouette, et. al. USDA. PNW-GTR-482. March 2000). In commenting on proposed Gravina sale, the Alaska Department of Fish & Game (ADF&G) expressed concern that "[a]s a result [of past highgrading], further harvest of these stands raises questions about whether biodiversity in the Tongass is being adequately maintained." (ADF&G Gravina Timber Sale DEIS NEPA/ACMP comments. June 25, 2001).

CT-13

NFMA and the planning regulations require the Forest Service to preserve diversity. See 16 U.S.C. § 1604(g)(3)(B); 36 C.F.R. § 219.27(g). The DEIS reliance on the yield class model prevents the Forest Service from adequately evaluating the impacts of project alternatives on the habitat conservation strategy, because an essential habitat attribute, stand structure, is missing. Without this essential data, how can the Forest Service adequately determine the effects of project alternatives on wildlife within the forest matrix between reserves, or whether TLMP's landscape connectivity objective is being met?

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ANALYSIS OF IMPACTS TO DEER HABITAT VIOLATES TLMP AND NEPA.

In addition to the deer model problems identified in the subsistence section, the DEIS contains many inaccuracies and misleading statements about deer habitat and effects of proposed activities on deer populations. In the DEIS, the Forest Service uses the deer habitat capability model to determine the effects on deer habitat for each alternative. This model was developed to determine the effects of clearcutting on deer habitat. In the DEIS, however, the Forest Service uses this model to describe the effects of partial cutting on deer habitat. The DEIS states that "other silvicultural systems (uneven-aged or two-aged), which probably have less impact on deer habitat capability, will be used on 35 to 75 percent of harvested acres... the results of the model are likely to overestimate the impact of this type of timber harvest [selective logging] on deer habitat capability." (DEIS 3-107) The Forest Service simply pro-rates the effect on deer habitat by multiplying the amount of retention in each unit by the difference between an unharvested unit hsi score and a clearcut unit hsi score. The DEIS fails to include any scientific evidence justifying this interpretation. In fact, according to a recent study by the Alaska Department of Fish and Game, some selection logging methods may have the same effect as clearcutting. "When all, or nearly all, of the mature trees in that small area are removed by logging, the stand response is indistinguishable from that of a clearcut." See Kirchhoff, Matthew and Thomson, Simon R.G., Effects of Selective Logging on Deer Habitat in Southeast Alaska: a Retrospective Study, 13 (1998). The DEIS does not back up assertions about lower impact, and the TLMP deer panel has not reviewed these claims. Contrary to the statements in the DEIS, ADF&G concludes that "so-called uneven-aged and two-aged harvest prescriptions... appear to be essentially smaller clearcuts within the larger unit boundaries. Few prescriptions... preserve the forest stand structure..." (ADF&G ACMP/NEPA Comments, June 22, 2001.) In essence, there is no consensus on whether the most recently proposed even-aged cutting methods actually reduce deer habitat impacts or not, and if so, to what degree. Any statements regarding the impacts based on the deer model are, at best, guesses on how the changes may relate to old growth habitat type. Therefore, the DEIS statement on effects of the proposed action on subsistence deer distribution and abundance (at p.3-125) suggesting that these proposed cutting methods will "probably have less impact on deer habitat capability" is mere conjecture, and without scientific basis. NEPA requires the Forest Service to fully explain the scientific basis behind its conclusions or clearly label them as unproven assumptions.

CT-18

The DEIS fails to adequately describe in detail the silvicultural systems applied under each alternative. Logging units are described by the % retention, but it is unclear what is being retained. Does the Forest Service mean % volume retained, % trees retained, or % basal area retained? Each of these lead to completely different results. Given the importance of the deer model analysis and retention of high quality deer habitat for subsistence uses and wolf population viability, the proposed project can not rely on unproven logging methods to minimize habitat loss. To satisfy NEPA, the Forest Service must do a better job of describing the logging methods employed for each alternative and estimating the subsequent effects on deer habitat.

CT-9

The wildlife resource reports on Gravina deer habitat analyses assume full implementation of the timber plan. The DEIS (at p. A-15) supports such analysis, predicting that "all suitable timberlands will eventually be scheduled for harvest... this decision is based on... the eventual use of all suitable lands for timber sale projects." Although multiple entries are therefore reasonable

and foreseeable, the DEIS only contains data and impact analysis for a single entry. The failure to disclose and consider the effects of reasonably foreseeable actions in the DEIS violates NEPA.

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When the TLMP deer model was first established, relative habitat values were derived from meetings of interagency experts, using hard data and professional expertise. Since then, ranger districts have changed lookup table coefficients without interagency review. (Personal communication with ADF&G biologist, Dave Person, June 4, 2001). In their Gravina comments, the Division of Wildlife Conservation noted that "...the particular iteration of the interagency deer model (and other species' models), as well as the way each is used in timber sale analysis, varies widely for timber sale analyses throughout the Tongass National Forest." (ADF&G Gravina Timber Sale DEIS NEPA/ACMP comments, June 25, 2001). ADF&G's concludes that these changes "make it nearly impossible to compare effects of sales or to know if effects portrayed in NEPA documents are consistent with the model's design." (Id.) ADF&G further states that the changes to the deer habitat model raises questions about the accuracy of the data and analysis presented in timber sale NEPA documents, and by decision makers. The Forest Service's propensity to modify the habitat models without interagency coordination and review violates TLMP. See WILD112.I.D. and WILD112.II.F.

CT-18

The DEIS discussion of indirect and cumulative impacts contains very little resource analysis. According to ADF&G, the scale of Gravina is so small that forest reserves will likely have little beneficial impact on deer and other old growth dependant species. (Personal communication with ADF&G biologist, Dave Person, June 4, 2001). Given this assessment, in combination with the proposed road connections with the Airport road system, aggressive development plans for non-Forest Service lands on Gravina, the removal of key Ketchikan-area hunting lands from protective LUDs, and the downward trend of Prince of Wales deer populations, the DEIS must more fully address the effects of rapidly increasing hunting pressure on the Gravina deer populations.

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ANALYSIS OF IMPACTS TO WOLF & MARTEN POPULATIONS ARE INADEQUATE

All of the problems identified with the DEIS forest structure and deer habitat analysis will affect evaluation of impacts on Gravina wolf and marten populations. The DEIS must reevaluate and disclose impacts from the proposed actions on these special management species.

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THE DEIS INSUFFICIENTLY ANALYZES KARST RESOURCES.

The Forest Service and Tongass Cave Project (TCP) have both been working to identify and value karst formations in proposed timber sales. In other project areas, TCP has found that pre-sale unit surveys completed by the agency or its hired contractors do not find many formations, and incorrectly evaluate the vulnerability of karst and cave resources to disturbance. The cursory description of karst resources in the DEIS is completely inadequate. The DEIS must provide much more detail about areas of low and medium vulnerability. It is probable that areas of low and medium karst vulnerability are adjacent to areas of high vulnerability. (Forest Plan 4-19). Because of karst's permeability, even karst determined to be of low and moderate vulnerability

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may be important to the water quality and flow of water in particular watersheds. Was any karst found in the Vallenar, Bostwick, South Bostwick, West-side, Nelson, and Dall watersheds? What sections of the units have karst? The DEIS maps lack sufficient detail to answer these questions. What steps were taken in project planning, and will be taken in roading and logging operations to protect karst features in order to maintain recharge area water quality? How will the helicopter logging along the western units affect the underlying karst resources?

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THE DEIS FAILS TO ADEQUATELY SHOW THAT THE GRAVINA TIMBER SALE IS NECESSARY TO MEET MARKET DEMAND FOR TONGASS TIMBER.

Appendix A of the DEIS indicates that the mean cutting rate for Tongass timber for the next 10 years is expected to be nearly 169 mmbf per year. (DEIS at A-6). This statement fails to compare this projection with the demand estimates provided by Brooks and Haynes, which estimates demand for timber over periods shorter than 10 years. For example in FY 2002, the year in which the Forest Service may offer timber from Gravina, Brooks and Haynes estimates timber demand to be between 96 and 130 mmbf. See Brooks and Haynes, Timber Products Output and Timber Harvests in Alaska: Projections for 1997-2010 (Sept. 1997). Although the DEIS claims the timber schedule described in Table A-1 is based on Brooks and Haynes, the Forest Service projected estimates between 113.7 and 173.1 mmbf. Please explain the difference between these two projections.

The market demand for Tongass timber has been declining and continues to sink. The Forest Service currently has a backlog of approximately 342.5 mmbf of timber sold but uncut. See USFS, Remaining Timber Sales Volumes (MBF) and Values by Purchaser as of May 31, 2001(attached). In addition, current information shows that there are 59 mmbf of timber on the shelf, and available to operators. See USFS, Tongass Shelf Volume to Date (Feb. 9, 2001)(attached). The DEIS is inadequate because it failed to disclose the backlog of Tongass timber, or explain how why the Forest Service persists in offering timber to a sunken market.

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The agency improperly relies upon meeting market demand as a purpose and need for the proposed Gravina sale. While an agency generally has discretion to identify the purpose and need for a proposed action, Congress has restricted the agency's discretion regarding timber sales on the Tongass. Section 101 of the Tongass Timber Reform Act elevates providing for balanced multiple use of all renewable forest resources above meeting market demand for Tongass old-growth timber. Only after complying with this instruction, as well as other applicable laws, may the Forest Service "seek" to meet market demand. Clearly the combination of renewable resources that best meets the needs of the American people includes protecting the roadless areas and existing uses in the Gravina project area from industrial-scale logging and road building.

Though the DEIS never discloses what percentage of the timber will come from which species, its likely that a high portion of the Gravina sale will be hemlock. The international hemlock market is currently oversupplied and hemlock exports "have collapsed their own market value by the record-breaking low sales prices" (see attached Pacific Rim Wood Market Report, June 2000).

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According to the largest private timber land owner in Southeast Alaska:

For a variety of reasons, the timber market in which Sealaska sells its timber -- the Pacific Rim market -- remains glutted, even in the absence of the USFS's timber-dumping program. The market is particularly grim for hemlock...

The result is a market that can take no more; indeed, hemlock exports to Japan from North America have already declined by 80% since 1980...

But despite all this, the federal government continues to force-feed the Pacific Rim market with surplus timber.

The inevitable short-term result will be to further depress already eroded timber prices...

(Letter from Loescher, President and CEO of Sealaska Corp. to The Honorable Ted Stevens, July 2, 1999).

The agency's conclusion that more timber from the Tongass is needed now to supply an overly saturated and price-depressed market is simply unreasonable. Instead of preparing and offering below-cost and deficit timber sales from Roadless Areas with extremely high value existing uses, the Forest Service should be investing its scarce resources in offering small sales to local operators off the existing road system.

We also reiterate our objections to the *Evaluating the Demand for Tongass Timber* (USDA, Forest Service, 1998). We have two primary concerns with this procedure. First, basing predictions of current market demand on historical conditions is arbitrary and will result in the persistent overestimation of market demand for Tongass timber. The huge backlog of sold uncut timber currently on the Tongass, as well as timber offered but not bid upon, is indicative of our concern. Secondly, the process proposed in *Evaluating the Demand for Tongass Timber* continues the agency's practice of selectively interpreting the plain language of Section 101 of the Tongass Timber Reform Act and ignoring the structure of this provision. The only way to give meaning to the plain words and structure of Section 101 is to conclude that Congress intended to subordinate the "seek to meet" directive to meeting the needs of all forest users. It is unreasonable for the agency to adopt procedures for implementing Section 101 of the TTRA that rely on the same agency policies that Congress rejected and sought to remedy in this landmark bill.

THE EFFECTS ANALYSIS ON SOCIAL AND ECONOMIC SKEWS COMPARISON OF ALTERNATIVES OVERSTATES THE BENEFITS FROM THE ACTION ALTERNATIVES.

In evaluating the impacts to the economies of Metlakatla, Ketchikan, and Saxman, the DEIS skews the analysis to favor action alternatives, particularly those that cut more timber. The analysis overstates the amount of employment and income for each of the alternatives, as well as the returns to the State of Alaska.

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With regards to estimates of direct employment and income, the DEIS fails to disclose or consider that a high percentage of the workers in the lumber and wood products industry are nonresidents. According to the Alaska Department of Labor, over 30 percent of this industry's workers were non-residents in 1999 (the latest year for which figures are available). Because nonresidents spend a greater portion of their earnings outside Alaska, a significant portion of the direct and any indirect income is lost from the Alaska economy each year. Both the number of direct jobs and the income from those jobs is therefore inflated because the Forest Service never discounted these numbers for nonresident workers.

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Although the DEIS estimates the number of indirect jobs that may result from the various alternatives, it violates NEPA because it fails to provide any explanation for the direct-to-indirect ratio used in the DEIS. The Forest Service also assumes, without any cited support, that there exists a positive linear relationship in Southeast Alaska between the number of direct and indirect jobs provided by selecting one or another alternative. A recent analysis, however, concludes just the opposite. See G. Robertson, Employment Impact Multipliers and the Economic Role, 62 Forestry Sciences 123-135 (reprinted in Yoshimoto and Yukutake, Global Concerns for Forest Resource Utilization, Sustainable Use and Management (selected papers from the International Symposium of the FORSEA MIYAZAKI 1998)).

CT-7

A third bias in the analysis of employment and income associated with this proposed sale is the failure to account for the loss of local jobs resulting from the export of round logs. In this sale, a higher logging level most likely means the export of an increased amount of yellow and red cedar. This will result in exporting more jobs, while the region bears the cost of impaired resources and lost non-timber economic opportunities. Without requiring primary processing for cedar, the Forest Service cannot justify using the 3.33 sawmill jobs/mmbf factor used for the 1997 TLMP, and cannot justify including any secondary benefits to supplier/service communities in its cost-benefit calculation. Removing the manufacturing jobs for a portion of the sale reduces the validity of the DEIS' timber supply and economics analysis. Using a more realistic job multiplier, the cost to existing uses cannot be justified under any of the action alternatives. In addition, since the DEIS never clearly discloses what percentage of the logging will be exported, the economic analysis clearly does not adequately display the economic and social effects of the proposed sale as it is currently configured.

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Finally, in estimating the returns to the State of Alaska from the each of the alternatives, the DEIS (at 3-21) erroneously states that "[l]ocal communities would not benefit from the Federal 25 percent Fund Act receipts under the No-action Alternative." The DEIS goes on to immediately to back away from this assertion when it notes that "[t]he recently enacted H.R. 2389, the Secure Rural Schools and Community Self-Determination Act of 2000, could change these returns." In fact, H.R. 2389 stabilizes payments to states and no longer ties them to the amount of timber cut from a National Forest. Instead, payments to state's will be based on the average of the state's three highest payments between 1986 and 1999. So, the DEIS incorrectly discounts payments to the State of Alaska from the No-action Alternative and assumes that payments will increase if an alternative that cuts more Tongass old-growth is adopted for this sale. Consistent with its obligations under NEPA, the DEIS should have calculated payments to the State of Alaska and affected communities based on both systems to improve the public's understanding of the economic effects of the proposed alternatives. Although Southeast communities have a few months left to select which system to be covered under, the Forest

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Service missed the opportunity to use this DEIS to inform the communities and residents about the effect of this new legislative program on their schools.

THE DEIS' ECONOMIC EFFICIENCY ANALYSIS IS INADEQUATE

As required by the Forest Service Handbook and the Revised Tongass Plan, the Forest Service performed an economic efficiency analysis for all action alternatives. The economic efficiency analysis is inadequate, however, because the agency failed to compare the total economic benefits of the project to the total economic costs. See FSH 2409.18, chapter 30, 32.32.

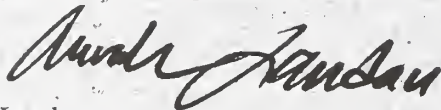
"Economic costs are the sum of the financial costs, non-market costs, and non-Forest Service costs." Id., sec. 32.24. The FSH further defines "direct" economic costs as including "negative impacts on resources that have an economic value." See id., chapter 10, 13.05.

Unfortunately, the Forest Service never fully quantified the non-market values or calculated the non-market costs resulting from implementing this project on this currently roadless area. The potential negative economic impacts from the approved project on the scenic, wildlife, and wildland values of the project area, including opportunities for wild lands recreation and nature-based and adventure tourism, are simply not taken into account when evaluating the economic efficiency of this project. The Forest Service violated NEPA because the FEIS fails to ensure appropriate consideration of "presently unquantified environmental amenities and values." See 42 U.S.C. § 4332(2)(B). Analysis presented in the DEIS impairs the fair consideration of the adverse environmental and economic effects of this project by the public and decision maker by only evaluating the economic costs and benefits to the timber sale purchaser and agency.

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IN CLOSING, it is inappropriate for the Forest Service to be planning this timber sale until the Roadless Rule and TLMP lawsuits are settled, and the TLMP SEIS is completed. The DEIS appears to be hastily written and violates NEPA, ANILCA and the Forest Plan. The usefulness of the DEIS is severely limited because the alternatives and discussions of impacts ignore the wealth of information regarding the high multiple use benefits of existing uses. Given the preemptive nature of this DEIS, and the value of the existing uses in the proposed sale area, and the lack of useful information disclosed in the DEIS, we can only support selection of the no-action alternative.

Thank you for accepting these comments on the behalf of SEACC and TCS.



Aurah Landau
Grassroots Organizer

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June 20th, 2001

To: Jerry Ingersoll
 District/Monument Ranger
 Tongass National Forest
 3031 Tongass Ave
 Ketchikan, AK 99901

Re: Gravina Island Timber Sale

Dear Mr. Ingersoll,

These comments on the Gravina Island Timber Sale are on behalf of the Juneau Group of the Sierra Club (JGSC). JGSC was formed over thirty years ago to advocate for the conservation of public lands in Southeast Alaska. The Sierra Club has members throughout the region who enjoy and depend upon the benefits that come from living amidst the Tongass National Forest. These benefits include recreation, subsistence, and the economic opportunities that derive from an un-cut forest.

The following points are intended to highlight some of our concerns with the Gravina Island Timber Sale Project and the DEIS describing it.

Roadless, Wilderness, 200 year rotation issues: Right from the beginning the DEIS improperly dismisses roadless area concerns as not being a “significant issue” (DEIS 1-15). Current events have proved the Forest Service wrong and the Tongass was immediately included in the final roadless policy making the Gravina sale illegal under the policy. Forest Supervisor Puchlerz’s letter dated March 5, 2001 was an admission of this when he extended the comment period for the Gravina Project to “provide more time to review the DEIS while questions about the National Roadless Area Conservation Rule are addressed.” Questions regarding the roadless rule are still outstanding and several other un-certainties have also arisen. While an injunction is now in place enjoining the implementation of the roadless rule, expedited consideration of an appeal of the decision has been granted. A decision to stay the stay or reverse the Idaho decision could be issued as soon as July. The Bush administration has agreed to implement the roadless rule if the Idaho decision is reversed, but

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plans a revision process that will have unknown impacts on the Gravina sale. Details of this planned revision are expected by the end of July. The Forest Service is under court order to prepare a supplemental EIS that evaluates all Tongass roadless areas, including Gravina, for their suitability as wilderness areas. An added uncertainty is that under the same court decision the requirement to manage the Gravina Island timber LUDs on a 200 year rotation basis has been removed. As all analysis of the impacts from logging on wildlife are based on a 200 year rotation those analysis's will need to be redone if the court decision is not overturned on appeal. Other requirements that effect this sale, such as road density and the amount of protected land in the Ranger District, have also changed with this decision. Throughout the Gravina DEIS the Forest Service analysis of important issues, in addition to wildlife and subsistence, are rationalized as complying with the 1999 TLUMP Record of Decision. There is no analysis that gives reviewers of the DEIS the information they need under a 1997 Land Management Plan. Indeed if the reversion to the 1997 plan stands after court review then the appeals to the 1997 plan that the 1999 ROD settled are again unresolved. Some of these appeals dealt with the 97 plan's inadequacy in regards to protection of wildlife viability and subsistence. These uncertainties, particularly those revolving around which ROD, the 97 or the 99, will govern the Forest Service's management of the Tongass and the project area, or whether timber harvest will be allowed at all in the Gravina Roadless Area, make the issuing of this DEIS premature, and raise the possibility that a new DEIS based on new realities will have to be prepared and issued.

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Purpose and Need and the Range of Alternatives; The Forest Service continues to elevate timber harvest demands over other uses and to depend on a flawed Market Demand Analysis. Current Market Demand has been estimated to be between 96 and 130 mmbf by Brooks and Haynes, Timber Products Output and Timber Harvests in Alaska: Projections for 1997-2010. JGSC believes even this figure is exaggerated as actual sales by competitive bid have been in the range of 50 mmbf over the last few years, showing that actual demand is less than stated by Brooks and Haynes. While the DEIS acknowledges in Appendix A that the Tongass Timber Reform Act's "seek to meet" clause is not a requirement but only one goal out of many that must be considered, the DEIS's purpose and need section focuses exclusively on timber production and economic uses of the project area. The DEIS then proceeds to select a range of alternatives that has all of the action alternatives, with the exception of #5 (the all helicopter yarding alternative), producing cut volumes in the narrow range of 32 to 37 mmbf. The lack of any alternative in the 15 to 25 mmbf range, with analysis of how such an

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alternative would effect other uses, is a serious flaw in the DEIS. This flaw is given more emphasis because the high harvest levels of the road building alternatives have not been justified by a realistic projection of Market Demand.

Economics of the Sale: A number of errors and inconsistencies dealing with the economics of the Gravina Project are readily apparent in the DEIS.

- 1) **Cedar;** Meaningful information is lacking on the species composition of the sale. It is apparent from the unit cards that there is a significant Cedar component (we are guessing more than 20%), but precise estimates are unattainable from the information presented in the cards. Nowhere in the DEIS does the Forest Service give even a rough estimate of what they think the percentage is. As Cedar is an exportable timber component that does not require in state processing, and recent timber sale history has shown that operators are seeking Cedar export permits on a regular basis, the numbers of direct and indirect jobs that the Forest Service is projecting will be generated from Gravina's alternatives are invalid (Table 3-9). CT-7
- 2) **Non-Forest Service Logging;** The estimates for jobs generated from logging activities on non-Forest Service lands, made possible by the increased access provided by road construction under the Gravina Sale alternatives (Table 3-10), is flawed for the same reason as the job figures applying to the National Forest logging. Besides the likelihood of the Cedar existing on these lands being exported, there is also a likelihood of the Spruce and Hemlock components being exported in the round. CT-7
- 3) **Returns to the State and Borough;** The DEIS is misleading when it states in regards to H.R. 2389, the recently passed legislation that changes how communities are compensated for having un-taxable Federal land in their vicinity (page 3-21), "It is unknown at this time exactly what those changes could mean to individual communities." In fact, payments under the new formula are so far in excess of the payment that could be expected under the old formula that the Forest Service should be operating under the assumption that all S.E. Alaska communities will select to have payments made under the new formula. For example, in the case of the Ketchikan Gateway Borough the annual payment under the new formula will be more than \$401,000 dollars per year. As a consequence Table 3-11 does not provide useful information but only serves to mislead CT-7

the reviewers. Furthermore the Forest Service is inconsistent in its application of this misleading information, not accounting for the returns they claim will go to the State and Borough in Table 3-12 when they calculate net values for the alternatives. Our calculations show that if the returns to the State and Borough are added to the project costs, that Alt. 3 and Alt. 4 would have a negative net value for the U.S. Treasury of minus \$133,899 and \$216,423 respectively. The invalidation of Table 3-12, where payments to the State and Borough haven't been included, invalidates Table 3-13, where they are added back in.

- 4) **Returns to the U.S. Treasury;** Basing the Public Investment Summary on only a few of the sale's direct costs (Table 3-12) misleads the public and does not comply with the Forest Service regulations that require the agency to consider all economic costs when performing an economic efficiency analysis. Not only have the returns to the State and Borough (which the Forest Service has assumed elsewhere will be paid) been left out, but other known costs such as road maintenance or road closure costs, post cut fish passage monitoring, and the Gravina Projects share of the forest wide sale program overhead have also been left out. Other Forest Service information on the real costs of the timber program is readily available and the fact that the Forest Service reports positive revenue returns to the U.S. Treasury for the Gravina sale puts them at odds with that information. It has been clearly stated in the Forest Service's own Roadless Area Conservation (RAC) FEIS that a loss of \$178 per mbf has occurred on average from 1996 through 1998 for all commodity timber sales on the Tongass (RAC FEIS 3-298). The FEIS projects that over the next 5 years, negative annual revenues of \$13,634,800.00 will result from Tongass roadless area sales (RAC FEIS 3-304). This computes out to a subsidy of approximately \$35,000.00 for each of the 383 direct jobs the FEIS anticipates will be generated by these sales (RAC FEIS 3-302). Even these numbers, based on a negative revenue of \$178 per mbf, are probably low according to the FEIS. The FEIS says "it is likely that preparing sales in inventoried roadless areas may have higher average costs than other sales" (RAC FEIS 3-303). In addition to the numbers reported in the RAC, the Forest Service just this year reported up-dated figures for 1998 that record a loss of 29.1 million dollars and an even higher subsidy rate of more than \$46,000 for each direct job generated by the Tongass commodity timber program, both roaded and un-roaded sales. The purpose of the

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National Environmental Policy Act is to provide an accurate disclosure of impacts to the natural and human environment for the public and decision makers. When the Forest Service in their analysis selectively uses or omits critical economic data, and their numbers regarding the economics of the sale are in such variance to those published elsewhere, JGSC can only conclude that they are trying to present the public with an unreasonably rosy economic picture of the Gravina Project.

- 5) **Summery:** The information presented in the economics section of the DEIS is lacking in meaningful content, is biased in presentation, and riddled with errors and omissions. Because of the inadequacies of this section alone, we request that a supplemental DEIS be prepared to comply with NEPA's mandate that agencies supply the public and decision makers with quality, timely information.

Structure Class, MIS Wildlife Issues, and HVPOG: As the Forest Service's methodology to gauge old growth habitat value and their analysis of wildlife issues are inter-twined, the inadequacies of one will bear on the inadequacies of the others. We will discuss them in the same section.

- 1) **Structure Class;** In the Gravina DEIS the Forest Service is relying on a yield class model (low, medium, and high POG) that does not provide the resolution necessary to distinguish high value wildlife habitat from medium or low value. A report from the Pacific Northwest Research Station published in March 2000 explains this quite clearly.

"It seems that many people are dissatisfied with the revised timber volume strata because they want to see forest structure delineated and mapped for the Tongass. Any forest stratification that has timber volume as its primary objective will necessarily group together stands of similar timber volume regardless of differences in forest structure. Our analysis showed that this is what happened in the timber stratum revision process. During this process, differences in forest structure were collapsed into a single category because they showed no significant difference in mean timber volume. Stands similar in timber volume can have a wide range of forest structures."

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(See USDA PNW General Technical Report PNW-GTR-482, March 2000, "Deconstructing the Timber Volume Paradigm in Management of the Tongass National Forest," by Caouette, et al., p.17)

"If the goal is strictly to provide efficient timber volume stratification, structural information is superfluous, and one would naturally collapse the five groups (data clusters on their graph) into three, merging groups located along similar net board-foot isoclines. The revised 1997 timber volume strata (low, medium, and high POG) did just that. The collapsing of five groups into three demonstrates the problems of having a strict timber volume-based mapping objective. Although the revised timber volume strata provide significant differences in timber volume, available information, which could be useful in modeling differences in forest structure, has been sacrificed." (ibid, pp.12-14)

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Conversely, Caouette, et al. also found that Structure Class data, using designations of volume class 4 through 7, shows differences in forest structure very well, even though it is not adequate for showing timber volume. (ibid, pp.10-12).

The Forest Services reliance on their yield class model throws into doubt their conclusions regarding Viable Populations, the adequacy of Old Growth Habitat Reserves, which need to provide connectivity and high value habitat (and already do not meet the preferred size), and the "actual" value of the High Value Martin Habitat protected under the project alternatives. The use of the readily available structure (TimType) class model, which reveals Forest Structure, is necessary if meaningful habitat information is going to be made available to the public. JGSC requests that this information be made available in a revised DEIS, that the DEIS include useful maps of forest structure, and information on the amount of each structure class harvested by alternative. We are not alone in asking that this information be supplied. The Alaska Department of Fish and Game has also requested information on the location of coarse canopy/big tree stands, and notes that a recent peer reviewed technical report by John Caouette of the Forest Sciences Lab has fulfilled the conditions set out by Tongass Forest Supervisor Puchlerz for providing such information (letter from Lorraine Marshall to project team, dated 2-22-01).

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- 2) **Deer;** The Forest Service's presentation on deer habitat capability is selective and biased. Critical information contained in the project's resource reports has been left out of the DEIS. Important conclusions that deal with deer that the Gravina project team has left out of the DEIS include;

"Clearcut harvest of all suitable and available timber at least 26 years prior to the end of the rotation....would reduce deer habitat capability in the project area by 26.5 percent." and "Harvest of all suitable and available timber over the course

of the 200 year rotation would reduce high-value habitat by 1,654 acres (29.7 percent).” (pg 7 wildlife report)

These numbers are correctly assuming a full implementation of the timber plan. The DEIS says in Appendix A;

“all suitable timberlands will eventually be scheduled for harvest to meet the current and projected demand for raw material in S.E. Alaska” and “This decision (*the timing of the Gravina Project*) is based on....the eventual use of all suitable lands for timber sale projects.” (DEIS A-15)

Nowhere in the DEIS does it say that the current Gravina Project will be the only entry. Given the statements made in Appendix A, the Forest Service should be assuming that multiple entries and full implementation is “reasonably foreseeable” and base their assessment of impacts to deer and other wildlife on that assumption (as has been done in the Wildlife Resource Report). Instead the project leaders have only included an assessment of impacts from the current proposed entry in the DEIS. This violates the mandate of NEPA that agencies include relevant, timely, quality information to the public and decision makers.

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Other relevant information not available in the DEIS includes the conclusion that hunter demand from National Forest and non-National Forest lands combined, will represent 35.9% of habitat capability by the end of the rotation (200y), and even without timber harvest demand will represent 26.4% of capability by 2154. As noted in the Resource Report, if hunter demand exceeds 20%, hunter success can be expected to decline.

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The DEIS admits the likelihood that the numbers for rural demand may be severely underestimated but makes no attempt to rectify the situation. There is every reason to believe that the residents of Metlakatla, who report taking 75% of the deer they consume from Gravina Island, utilize more than 14 deer a year as a community, or the 10 deer a year the DEIS says they get from Gravina. Other surveys have found as much as a 300% under reporting from the surveys the DEIS is depending on (personal conversation with Dave Person, Wolf biologist for ADF&G). The Forest Service needs to obtain better information.

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The DEIS claims that non-traditional clearcutting prescriptions planned for the sale units mean that the results of the deer model are likely to overestimate the impacts of timber harvest on deer habitat capability. There is no data to support this claim and there has been no review of the claim by the TLUMP deer panel. The lack of sufficient information on the structure of habitat protected by these methods (see discussion of volume class structure above) also casts doubt on the claim. Before inserting such an un-supported claim in the DEIS, which potentially misleads the public, data and peer review should be sought. Due to this and other un-reviewed changes to the deer model (see Person, Kirchhoff, Van Ballenberghe, and Bowyer; letter to Pendleton dated Sept. 1997) JGSC requests a review of the model be undertaken.

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3) **Wolf;** As wolf are dependent on deer, and the deer model is used to assess the habitat needs of wolf, inadequacies in deer habitat projections are also inadequacies in predicting the impacts from logging on wolf viability. The concerns that road access and increased hunter demand for deer will lead to a violation of the Forest Plan's directive to maintain well distributed viable populations (DEIS 3-98) are only strengthened by the inadequacies we have enumerated in previous paragraphs. The DEIS is silent on how the Forest Service will manage roads, and the resulting human use of them, to protect wolfs on Gravina from being hunted out. The likelihood of multiple entries (discussed above), over an uncertain rotation period, calls into question whether road densities compatible with continued viability of wolf population on Gravina Island will continue to exist. When the DEIS claims that the loss of the Gravina pack will not threaten the forest wide viability of the wolf (3-98), it fails to provide any assurance that there will be continued viability on the biogeographic province level. Because of the uncertain status of lands protected under the 1999 rod, JGSC requests the Forest Service to either take the time to do an analysis under the assumption that those lands will now be logged, and present that analysis to the public in a supplemental DEIS, or alternatively, indefinitely extend the comment period of this DEIS until the legal issues are resolved.

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4) **HV Martin Habitat:** Martin Habitat, as with deer habitat, needs to be evaluated on a Forest Structure basis rather than the Low, Medium, and High Volume POG classifications. As noted above the volume classifications the Forest Service is using

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have little value for predicting habitat value. Evaluation of the amount of HV Martin habitat needed to comply with Forest Plan Standards and Guidelines should be based on an assumption of multiple entries. Careful consideration of how the Forest Service interprets the standards and guidelines is also necessary due to unclear, imprecise language in the 1997 ROD. The following is excerpt from Sitka Conservation Society's comments on the Cholmondeley Timber Sale DEIS, section 4, cumulative impacts).

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In the Forest Plan, two sets of standards and guidelines follow the objective, in sections XVI.A.2(b) and (c). For high value marten habitat in logging units that are in provinces that are at higher risk for marten, one or the other of these sets of regulations must be applied. Which of them applies is determined by criteria that are included in the headers of the two sections, and read together we will call them "the criteria."

The criteria considers the amount of "productive old-growth forest" that would be harvested cumulatively, considering logging from both past activities and the proposed project. If over 33 percent of the productive old-growth has been affected, Section-b mitigations must be applied. If less than 33 percent, Section-c applies instead.

The difficulty here is that the objective makes clear that "high volume productive old-growth" is the high value habitat that must be protected. The criteria, however, have nothing at all to do with this high value habitat. They determine the operative standards and guidelines with a test based simply on "productive old-growth," the majority of which is the lowest volume class of productive old-growth forest.

The ultimate responsibility for protecting the viability and wide distribution of species is at the project level. This is the last chance to compensate for any errors that may have been made inadvertently at higher levels of planning. We believe there are several serious editorial problems with the marten standards and guidelines in the Forest Plan (including the problem above), and that they should be considered in the analysis of Cholmondeley Project impacts on marten and in the decisions, VCU by VCU, of whether Section-b or Section-c guidelines should be applied. These problems are:

1) Areas where regeneration has failed should be considered in addition to stands that have been "converted to young conifers" (see Section-b criteria, in our Appendix-C) in determining whether the 33% threshold has been exceeded. Areas of failed regeneration are included by Section-c's language but not Section-b's, and we believe this inadvertent result of wording differences resulting from differing sentence structures.

2) It is unclear which criteria applies in a case where 33% of the productive old growth has been lost (operative phrases in the two criteria are "over 33 percent of the productive old growth" and "less than 33 percent of the productive old growth"). We believe this oversight was inadvertent.

3) Most importantly, the habitat characteristics that the objective is intended to protect (high volume timber strata below 1500 feet elevation) should be included in the operative phrase of the criteria, but was not. It seems that "high volume productive old-growth timber strata," as expressed in the objective was too much of a mouthful, and was truncated by removing the high volume phrase.

4) Determination of which standards and guidelines to apply is confused by having the criteria spread over the headers of the two sections. The heading in Section-b should have been worded (for openings over two acres), "If this is the case, apply these guidelines; otherwise apply the guidelines in Section-c" – with all criteria in one header only.

These several anomalies in Sections-b and -c relative to the Forest Plan's marten objective indicate that the mitigation measures were poorly crafted and poorly edited. This must be taken into account in the planning, field work, analysis, and NEPA documentation of this project. The objective is clear, and what the criteria should have included to achieve the objective is now also clear.

Request Regarding Application of the Forest Plan Marten Objective:

- 1) If openings over 2 acres are not created in a unit, apply guidelines in Forest Plan section WILD:XVI.A.2.d;
- 2) If over 33 percent of the original (existing in 1954) high volume productive old-growth timber strata below 1500 feet elevation in the VCU has been harvested, or will have been harvested as a result of this project, apply Forest Plan section WILD:XVI.A.2.b;
- 3) Otherwise, apply Forest Plan section WILD:XVI.A.2.c;
- 4) "High volume productive old-growth timber strata" means forest classification strata defined as "high volume" in the current Interagency Marten Habitat Capability Model."

CT-5

We believe this is a fair interpretation of how the Forest Plan's objective concerning marten was intended to be implemented, poor craftsmanship of the existing criteria aside.

JGSC concurs with this assessment of the Martin Standard and Guidelines contained in the 1997 ROD and request that SCS's requests in regard to the Cholmondeley sale be complied with for the Gravina sale.

- 5) **High Volume Productive Old Growth and ORGs;** HV-POG is a silvicultural classification, not a habitat one. However, as it is being used to evaluate impacts to habitat in the DEIS it is important to note that under all alternatives the vast majority of POG being removed is from low elevation stands. As the DEIS notes on page 3-106 this class of POG is important to Wolf, Goshawk, American Martin, and the "low elevation, high volume productive old growth habitats are particularly important to deer, especially during severe winters". Alternative 4 would remove 12.6% of the existing low elevation POG in the current proposed entry. Given the probability of multiple entries (see discussion of deer impacts) this percentage is likely to be much more over the rotation period. For example if you assume 3 equal entries over the rotation, it could result in 37% being removed. The

CT-14

assumption of 3 entries is based on table 3-8 where, under the heading of “Percent of Suitable Base Harvested *this* Entry”, 33% is given for alternative 4 (emphasis added). This is in addition to the 634 acres removed in a previous entry.

CT-14

The DEIS says on page 3-98 that, “Timber harvest from the current project and reasonably foreseeable future actions is unlikely to significantly affect old-growth habitat connectivity on National Forest System land within the project area. Additionally, the majority of POG and high-volume POG will remain protected as part of the Old-growth Habitat Reserve system.” Without information on structure there is no assurance that the good habitat is not being high-graded. It is quite possible that the admittedly small ORG’s are not located in the most favorable places, but simply where convenient for timber sale purposes. It is impossible to tell. There is also no mention of future entries or the cumulative impacts from non- Forest Service logging. As a consequence the DEIS’s statement quoted above is without foundation.

CT-13

CT-11

CT-14 / 23

Cumulative Impacts: Some instances of errors in the analysis of cumulative impacts have already been noted. The lack of discussion regarding future entries as it applies to all cumulative impact issues has been noted and is serious. Also noted in our discussion of economic issues is the Forest Service’s assumption that the same level of impacts will occur from logging on non-National Forest land as will occur in the project area. In reality the impacts will be more severe. Other land owners on Gravina can be expected to cut close to 30mmbf (DEIS pg. 3-4), an amount nearly equal to the current Gravina Project’s preferred alternatives. Yet there is no assessment of cumulative impacts to water quality and Essential Fish Habitat, or even an estimate of how many stream crossings will be needed. The forest Service’s decision to allow less than preferred size ORGs needs to be re-assessed in light of cumulative impacts that may result from the less restrictive requirements for the logging of non-National Forest lands that will be made possible under Alternative 4.

CT-14

There is no assessment of cumulative impacts on the Revillagigedo/Cleavland biogeographic province (BP). An assessment backed with data is needed, not just a statement that “none (of the alternatives) is anticipated to directly impact the old-growth ecosystem to a degree at which biological diversity or population viability would be compromised” (DEIS 3-97). While data is provided for Gravina Island on the loss of POG and HVPOG (table 3-34), none is provided for the BP. This is of particular concern given the possibly permanent rollback from the 1999 ROD to the

CT-11

1997 ROD. The added protections of the 99 revision addressing wildlife viability concerns can no longer be assumed as they were in the drafting of this DEIS. Also of concern are the cumulative impacts on the BP scale of continued cedar high-grading, cedar decline, and the inability of the Forest Service to successfully accomplish thinning and regeneration programs (DEIS 3-96). There is no assurance that BP and forest wide species variability and composition is being maintained in regards to cedar species. We request that an analysis of this issue be undertaken and included in a SDEIS. Cumulative impacts to subsistence will be discussed in the next section.

CT-14

Subsistence and Traditional Use; As noted in preceding sections of these comments, projected increases in hunter demand for deer, even without timber harvest activities, are projected to lead to a decline in hunter success. The Gravina Project Resource Report on Subsistence also states in its finding that “increases in hunter demand and access combined with declines in habitat capability indicate that it is possible there will be significant restriction on subsistence opportunities and use at some time in the future unless a subsistence priority for harvest of deer in WAA 101 is enforced.” The DEIS notes that it is possible Ketchikan residents may also face restrictions on harvesting deer on POW Island resulting in increased hunting pressure on Gravina Island. As we noted previously (see our discussion under the heading Deer), estimates of rural use of the project area for subsistence harvest of deer has probably been severely under estimated. These statements considered together lead to the conclusion that the cultural and traditional subsistence uses of Gravina Island’s resources by Alaskan Natives is being jeopardized by the Gravina Timber Project. This conclusion is shared by the associations which represent the Native Americans with the closest ties to Gravina Island’s resources and history. The Metlakatla IRA, the Saxman IRA, and the Ketchikan Indian Corporation have all expressed concerns through scoping and subsistence hearings that the traditional, cultural, and subsistence uses of the project area are threatened. At a recent subsistence hearing in Ketchikan those testifying were unanimous in advocating for the no-action alternative. Concerns are not limited to the Forest Service’s limited definition of subsistence. In the words of Elmer Makua, President of the Tongass Tribe;

CT-15

“At the center of the Native customary and traditional way of life are land and the concept of subsistence. It is important to understand that *subsistence* is a white man’s word, and it does not capture the traditional way of life. The word *subsistence* suggests poverty or bare survival, while the experience for Alaska Natives is rich, vital, and a fulfilling way of life. For our discussion however, I will use the term subsistence, since it is part of the vocabulary necessary to follow the contemporary politics and law surrounding the Tongass. Subsistence

is also the word used to describe the spirit and harvest of other Native and non-native residents of Southeast Alaska.

It is plain to see that Gravina from the time in memorial has been a place of gathering and as mentioned above, subsistence still plays a role at present time.

The traditional subsistence life in Southeast Alaska forms a deep web of connections between the people, the land, the sea, the wildlife, and the spirit.

Customary and traditional foods are essential to the physical health of Southeast Alaska Natives, and changes away from the traditional diet are believed to contribute to diabetes, heart disease, obesity, and cancer. Gravina is well known for its Black Seaweed and has that special ecosystem to support its growth. Black seaweed is a traditional source of protein and acts as a natural cleanser for the elderly intestinal tract.

In Southeast Alaska, relying on subsistence foods for a subsistence part of one's diet is a matter not only of choice, but also of necessity.

A number of factors, including great distances from other food sources and a compromised position in the cash economy, combine to make Native communities physically and economically dependent on traditional subsistence resources.

That brings to mind the Accumulative impacts from all recent timber sales in the area, the Cholmondeley Timber sale, Slide Ridge Timber sale and Licking Creek Timber sale, that are all in inventoried roadless areas. This is more pressure on the resources and availability of the resources.

Subsistence living is not only a distinct way of life, it is also a life enriching process. Conservation and perpetuation of subsistence resources is part of the traditional subsistence way of life, and is mandated in traditional law and custom.

The traditional subsistence way of life makes it evident that the subsistence life is much more than putting food on the table. As David Case, a leading authority on Native law in Alaska has noted, the ability of Alaska Natives to engage in the subsistence life is a measure of their self-determination. (letter from Elmer Makua to Alaska Rainforest Campaign, dated 3-26-01)

Of particular note in Mr. Makua's comments is the mention of some of the other sales impacting subsistence opportunities in the BP and on POW. In addition to those sales, others of note include Sea Level, Upper Carroll, Chasina, Moria, and Emerald Bay. The DEIS is silent on the cumulative impacts that could result from all these sales on subsistence opportunities in the whole BP, and to Gravina in particular. We request such an analysis be done.

CT-14

We believe the Forest Service's interpretation of ANILCA Sec. 810 is being used to by-pass the intent of the act. The reliance on a perfunctory set of hearings without any real consideration to removing significant restrictions or dropping the project, does not comply with the underlying purpose of this section of ANILCA, which is to protect the cultural and traditional way of life for Alaska's first peoples. The Forest Service has repeatedly used a flawed Market Demand Analysis, has repeatedly sited a false mandate to give timber harvest priority over other uses, and restricts their

CT-15 / 22

Appendix B

range of alternatives to those that deliver a high cut volume. They then cavalierly proceed to choose option 3 when the inevitable finding of significant subsistence restrictions is made (see our discussion of Purpose and Need and the Range of Alternatives).

CT-21

We agree with the Alaska Natives testifying in Ketchikan that even without other considerations, from the standpoint of subsistence alone, the only acceptable alternative is the no action one.

Helicopter Logging and Alternative 5; The Forest Service's explanation of helicopter yarding costs found on page 3-15 of the DEIS should include the basis for the Forest Service's claim that 75% of the stump to truck costs can be attributed to flight distance alone. The DEIS cites the methods developers (Lunde and Simmons, 2000), but does not provide the study itself, or any of the data it was based on. We raise this issue because we remain skeptical of the method's conclusion. A doubling of the flight distance has no effect on the time it takes to attach to a load, raise it, lower it at the destination, and release the load. We are not convinced that adding 2200 feet of flight distance, a minute or two of flight time at most, translates to another \$225 of cost per mbf. We would like to know if the methodology has been peer reviewed, compared to methodology in use elsewhere in the National Forest System, field tested, and how it differs from the previous methodology used in Region 10. In regards to Alternative 5, it is unclear why some of the helicopter units that were economical in other alternatives were dropped for number 5. In particular units 7 and 14 appear to be close enough to Clarence Strait so that they could use one of "the numerous barge drops" anticipated under alternative 4. The unit cards make no mention of where the drop points will be for any of the helicopter units, or whether the drops will be to LTFs or road segments.

CT-7

CT-19

Log Transfer Facilities; The DEIS states on page 3-37 "In all alternatives, log booms or barges would be placed in coves and inlets close to the units being harvested." There is no information on which coves will be used or the resources that will be impacted by the location of these facilities in the un-named coves and inlets. This information is critical for the evaluation of all alternatives. No information is presented on the existing facility in Tongass Narrows other than to say yearly dive surveys are conducted. What are the results of the surveys? Has the Zone of Deposit been exceeded already? How deep are any already existing deposits? What will be the impact on this existing LTF of millions of board feet from the Gravina sale going through it? The DEIS is silent on these questions. The Tongass Narrows have recently become notorious for fish waste discharges and

CT-19

accumulations that exceed water quality standards. Is the reliance on this LTF by the Gravina Project going to add to the impacts on an already impaired waterbody? The lack of any information on these subjects renders the issuing of the Gravina DEIS premature.

CT-19

Slopes, Wetlands and Fish Passage; The DEIS's two preferred alternatives, numbers 3 and 4, pose the highest risks to soil resources from mass movement (DEIS 3-83). Alternatives 3 and 4 have roughly 40% of their cutting in acres with MMI-3 or Mmi-4 ratings (table 3-25b). These risks are rationalized in the DEIS as being not feasible to avoid (DEIS 2-4), but the DEIS does not include an adequate range of cut volumes among the 3 road building alternatives to justify this statement. An alternative that takes less volume from the Bostwick and Vallenar watersheds could "feasibly" avoid many high risk areas (see our discussion under the heading Purpose and Need and the Range of Alternatives). Additionally the DEIS notes that the mapping of slopes for their landslide potential is ongoing (DEIS 3-83). It then says on page 3-84 "the offsite effects of soil erosion, soil displacement and landslides are not easily quantifiable and a watershed wide quantification of sediment and its effects on stream systems has not been completed on the Gravina Island Timber Sale area." These statements render the DEIS premature as reviewers will not be have sufficient information to comment before a final decision is made.

CT-24

The DEIS makes the same flawed argument when discussing the building of roads and the cutting of forest in wetlands as they have in the case of slopes. Executive Order 11990 says "Where feasible, direct and indirect support of new construction in wetlands must be avoided." The consideration of a roaded alternative significantly lower then the 30mmbf cut level is necessary to justify the Forest Service's claim that it is not feasible to avoid many of the "short and long term adverse impacts associated with the destruction or modification of wetlands". While the DEIS gives a listing of the various kinds of wetlands found on Gravina and categorizes them by value, they do not reveal what proportion of the wetlands effected by road building or timber harvest are high value under each alternative.

CT-24

In the Watershed and Fisheries section the DEIS uses an SRI methodology that gives a relative risk ranking to the various watersheds in the project area. The relative rankings are devoid of any absolute assessment of risk. A determination has been made that the project may adversely effect EFH (DEIS 3-50) and that consultations with NMFS will continue. However experts have concluded that conducting a watershed analysis at the beginning of a project is advisable and would provide the Forest Service with the essential information they need to protect fish habitat (AFHA report,

CT-5

Appendix B

Appendix C, *an evaluation of the Effectiveness of Current Procedures for Protecting AFH on the Tongass National Forest, Sept. 1994*). Has such an analysis been done? (As noted above a watershed wide analysis on the effects of sediment on streams hasn't been completed.). The results of EFH consultations with NMFS, a completed watershed analysis, and useful information on the actual risks to EFH are essential to the review of this document. Additionally the DEIS gives the numbers of crossing for each alternative but does not separate them by class (pgs 3-48, 3-49). Quantitative information on risk and stream crossings needs to be presented in a form that is accessible and understandable to the public, not buried in road and unit cards and left for the public to un-cover and compile.

CT-24

CT-5

Conclusion; We request, for the numerous reasons noted in the body of these comments, that the Forest Service select the no-action alternative. If this is not done then we request the Forest Service withdraw this DEIS until such time as the legal issues surrounding the status of Gravina Island are settled. If timber harvest is then still allowed in the Gravina roadless area a revised DEIS will be necessary to provide the information that is lacking in the current document.

Best regards,

Mark Rorick, 

Chair Juneau Group of the Sierra Club

1055 Men. Pen. Rd. Juneau AK 99801

(907) 789-5472

June 18, 2001

Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Ave.
Ketchikan, AK 99901

RE: Gravina Island Project Area Draft Environmental Impact Statement

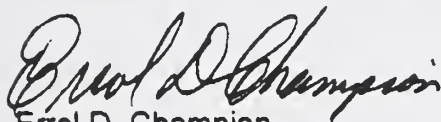
Dear Mr. Ingersoll:

I am in support of Alternative 4 in the DEIS. We need to follow the Tongass Land Management Plan and insure there is an adequate supply of wood fiber for the timber industry. The remaining timber jobs will not survive if the industry does not have some reasonable assurance of timber to be processed in the remaining mills.

CT-7

Thank you for the opportunity to comment on this DEIS.

Sincerely,



Errol D. Champion
Box 33066
Juneau, AK 99803

Tongass Conservation Society

P.O. Box 23377 Ketchikan, AK. 99981

Jerry Ingersoll
District Ranger
Tongass National Forest
ATTN: Gravina Island
3031 Tongass Ave.
Ketchikan, AK. 99901

The following comments are submitted on the behalf of the Tongass Conservation Society, for the record we support the comments submitted by SEACC on the DEIS on the Gravina Island timber sale.

The DEIS failed to adequately protect the multiple resources that many of the residents depend on for customary and traditional use. The DEIS failed to recognize the Roadless issue, and reflect the report DNR submitted on the sensitivity of the ecosystem on Gravina Island, and properly evaluate the effects on all accumulative and connected actions proposed in the near future.

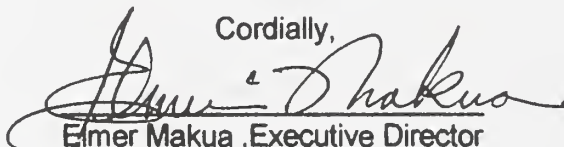
CT-3

CT-1

CT-14

In conclusion TCS can only support the "NO ACTION ALTERNATIVE"

Cordially,



Elmer Makua, Executive Director
Tongass Conservation Society

June 22, 2001

Jerry Ingersol, District Ranger
Ketchikan, Misty Fiords Ranger District
30301 Tongass Ave.
Ketchikan, Alaska 99901



Re: Gravina Island Timber Sale Draft Environmental Impact Statement (DEIS)

Dear Mr. Ingersol,

Please accept the following comments concerning the Gravina Island Timber Sale Draft Environmental Impact Statement (DEIS).

As an adjacent property owner the Alaska Mental Health Trust (Trust) would be effected by the selection and implementation of either Alternative 3 or 4 as presented in the DEIS. Both alternatives propose construction of a road that crosses and accesses Trust land and commercial timber on Gravina Island. We routinely work with private individuals and public entities to establish easements on Trust land. We have a close working relationship with other Ranger Districts on the Tongass National Forest and believe that if either Alternative 3 or 4 is selected we can work cooperatively with your staff to determine the actual road location on Trust land and grant an easement.

CT-23

As one of the larger non-federal timber owners in Southeast Alaska, we support the timber industry and the continuation of commercial timber harvest in the region. We are concerned that as a result of the shrinking timber supply, infrastructure necessary to support the timber industry is rapidly disappearing. We encourage a steady and continued harvest of commercial timber from the national forest in a responsible and economically feasible manner.

CT-7

We look forward to working with you and your staff on this and other projects.

Sincerely,

A handwritten signature in dark ink, appearing to read "Doug Campbell".

Douglas M. Campbell
Senior Resource Manager

Alaska Mental Health Trust Land Office • Department of Natural Resources

550 West 7th Avenue, Suite 1430 • Anchorage, Alaska 99501 • Telephone: (907) 269-8658 • Fax: (907) 269-8905



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

July 18, 2001

Reply To
Attn Of: ECO-088

97-088-AFS

Jerry Ingersoll
District /Monument Ranger
Attn. Gravina Island
3031 Tongass Avenue
Ketchikan AK 99901

Dear Mr. Ingersoll:

We have reviewed the draft Environmental Impact Statement (EIS) for the proposed Gravina Island Timber Sale in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and §309 of the Clean Air Act. The draft EIS examines proposals to harvest between 12 and 37 MMBF of timber on almost 40,000 acres of US Forest Service land on Gravina Island, which totals over 61,000 acres, and is situated just west across the Tongass narrows from Ketchikan. One preferred alternative, Alternative 4, proposes to harvest 37.77 MMBF of timber from 2,218 acres and extract harvested logs by constructing and using 22.6 miles of road, an existing Log Transfer Facility(LTFs) in the Tongass Narrows, numerous barge drop locations on the south end of the island, including Bostwick Inlet, and one in Grant Cove. A second preferred alternative, Alternative 3 would harvest 31 MMBF of timber from 1,819 acres, construct 22.2 miles of new road, and use the LTF in Tongass Narrows.

We have rated the EIS, EO-2 (Environmental Objections- Insufficient Information). We base our environmental objections to the project on several factors. The first of them is the severity of environmental impacts, which include building and operating roads in roadless areas, which would cause additional and substantial cumulative impacts to Forest Service lands and non-Forest Service lands on the Island; significant long-term impact to deer habitat, an important regional subsistence resource; roadbuilding impacts to fish bearing streams, wetlands, and aquatic resources. The second objection is the lack specificity in the project purpose and need, and the lack of detailed impact assessments for many resources on Gravina Island; particularly the lack of cumulative impact assessments. Our third objection concerns the selection of Alternative 4 as a preferred alternative, and the limited range of reasonable alternatives for the decisionmaker to choose from.

Regarding the selection of Alternative 4, this alternative is clearly the most damaging to the environment. It is the only alternative to leave constructed logging roads (16 miles of road) open and maintained. This would transform 45% of the present 33,000 acre roadless area on Gravina Island to a roaded condition and, in addition cause cumulative impacts to timber



resources and roadless areas on Forest Service and non-Forest Service lands. It would remove up to 2200 acres of Productive Old Growth (POG) forests, fragment the existing forests, cause long-term impacts to wildlife habitat, cause the most damage to aquatic resources, including harvest on 723 acres of wetlands, use an existing LTF in Tongass Narrows, and a number of barge drop locations on the south end of the island. Other alternatives you have considered avoid and minimize many of these impacts. Regarding the purpose and need discussion and impact assessments, including cumulative impacts contained in the EIS, portions of our detailed comments (attached) reference specific locations in the text where we believe purpose and need statements need to be explained or an impact assessment needs to be done or improved. The EIS in its present form, documents significant impacts with incomplete impact assessments, thus precluding the reviewing public and decision makers from fully estimating the environmental risks to Gravina Island.

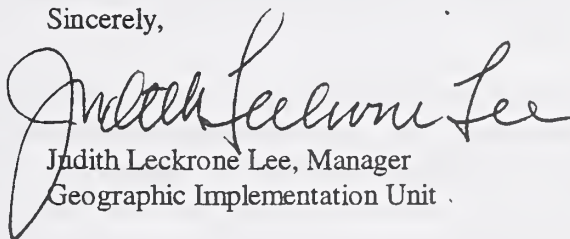
We, therefore, strongly encourage the Forest Service to develop and select a new preferred alternative that emphasizes helicopter logging, like Alternative 5, but combines it with ground-based extraction methods using some of the features of Alternatives 2 and 3. This new alternative would greatly reduce impacts to roadless areas, old growth forests and aquatic resources; it would have a better chance of providing timber on a sustained yield basis; and it would allow increased non-motorized access to Gravina Island while being less costly than Alternative 5. EPA believes that such an alternative would better meet the stated project purpose and need (manage timber resources for sustained yield of saw timber; provide sufficient timber supply to meet market demand; provide diverse resource uses for the local and regional economies; support natural resource employment opportunities) while avoiding many of the impacts of Alternatives 3 and 4. If a new alternative is not developed, we recommend that the Forest Service select Alternative 3 as the preferred alternative, and that the Final EIS and Record of Decision reflect the adoption of this alternative.

CT-21

CT-12

This rating and a summary of our comments will be published in the *Federal Register*. A copy of the rating system used in conducting our review is enclosed for your reference. Thank you for the opportunity to review this draft EIS. If you would like to discuss these issues, please contact Jonathan Freedman at (206) 553-0266.

Sincerely,



Judith Leckrone Lee, Manager
Geographic Implementation Unit

Enclosures

cc: Kevin Hanley, ADEC
Chris Meade, EPA
Dave Powers, EPA Forest Team Leader

Appendix B

Environmental Protection Agency Detailed Comments on the Gravina Island Timber Sale Draft Environmental Impact Statement (EIS)

Purpose and Need

We are concerned about the lack of specificity in your purpose and need statements. In regard to Purpose and Need statement number two on Page 1-5, the EIS should state how much of a timber supply is sufficient to meet the annual demand for Tongass National Forest timber, and what is the "market demand for the planning cycle." In Purpose and Need statement number three, the EIS should state what resource uses you are attempting to provide for, how you rank them in importance, and how much you believe is sufficient to contribute to the local and regional economies. If you believe this information is provided elsewhere in the document, reference the text locations in this Section.

CT-21

The above questions are important to answer, because your purpose and need statements form the basis for formulating alternatives and determining the range of those alternatives. While you note (again on Page 1-5) that this DEIS cannot address "decisions made at higher levels", you still need to explain such decisions, and what requirements they have set in your purpose and need statements.

You note on Pages 1-8 and 1-9 that timber harvest is to be scheduled on a 200-year harvest rotation rather than 100 years to better conserve winter deer habitat. The EIS should explain how those changes in the harvest schedule translate to quantified changes in timber management done on the ground. This is neither summarized here, nor discussed clearly enough in Chapter 3.

CT-14

Alternatives

The DEIS lacks reasonable alternatives for the decisionmaker to choose from. NEPA requires that an EIS include a full range of reasonable alternatives and denotes the importance of this by characterizing the alternatives section as the heart of the EIS (40 CFR 1502.14). Alternatives 2, 3, and 4 are essentially variations on a similar proposal, differing substantially only in that Alternatives 2 and 3 would close or decommission the logging roads, avoiding some of the subsequent damage.

CT-21

The only alternative which is truly distinctive is Alternative 5, which proposes all timber harvesting by helicopter, causing much less long-term environmental damage. It does not appear that Alternative 5 is a realistic proposal as it is presented in your range of alternatives, and given the generality of goals as cited from your Forest Plan. While alternative 5 would allow Gravina Island to retain its roadless character, the EIS data suggests you believe it is less economically viable than Alternatives 2-4, owing to the higher unit cost of helicopter yarding, and may not meet your stated purpose and need as well or completely as Alternative 2-4.. For example, it provides

fewer employment opportunities, and in harvesting less timber than the other alternatives, may not meet what you determine to be the market demand. It is very useful for purposes of comparison, but one that market conditions ultimately may not allow.

Alternative 5, however, has great advantages because is less environmentally damaging than Alternatives 2-4. It avoids the construction of roads, and consequently reduces impacts to old growth forests, aquatic resources, streams, and roadless areas. In addition, helicopter logging completely avoids all the cumulative impacts associated with the post-harvest maintenance of open road on Forest Service lands. Therefore, the Forest Service should develop a hybrid alternative that falls within the range of alternatives analyzed. Such an alternative would emphasize helicopter logging as the main yarding method, and include other means of harvest and road management such as Alternatives 2 and 3 do, in order to better address the elements of the Purpose and Need that Alternative 5 in its present form does not do as well. This new alternative should appear in the FEIS.

CT-21

We are concerned that the most environmentally damaging of the alternatives considered, Alternative 4, is one of the Forest Service's preferred alternatives for this project because of the impact to roadless areas (see additional comment on roadless areas below). Alternative 4 proposes to build the most roads of any alternative. Because 16 miles of road would remain open following timber harvest, this alternative would reduce by 45%, the present 33,000 acre roadless area on Gravina Island, transforming it into a roaded recreational area. It would impact the most streams of any alternative, including fish bearing streams, the Bostwick system mainstem, and Vallenar Creek. It would contribute to cumulative impacts to timber resources and wildlife habitat, and to currently unroaded areas on non-Forest Service lands (see Cumulative Impacts section below for further detail). The EIS states that maintaining open road would provide new opportunities for roaded recreation opportunities on Gravina Island.

Scoping identified that Ketchikan community organizations saw the proposed action as an opportunity that could provide new recreational areas. Scoping, however, identified other, conflicting concerns, such as Tribal concerns for maintenance of subsistence resources, and resource agency concerns for wildlife habitat. The draft EIS has not presented information characterizing local demand for recreation, nor any information that suggests that this need must be met on Gravina Island. We believe that preventing impacts detailed in the EIS outweigh the benefit from providing roaded recreation in this location. EPA recognizes that "providing a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska" is a long term land use goal and desired future condition for the Tongass National Forest as stated in the Forest Plan. However, we do not believe that it is a goal that needs to be met in each and every timber sale.

CT-6

If the Forest Service decides not to develop a new alternative, we recommend Alternative 3 as the preferred alternative, because it meets your purpose and need while minimizing the environmental impacts of Alternative 4.

CT-12

Cumulative Impacts

EPA has issued guidance on how we are to provide comments on the assessment of cumulative impacts, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*, which can be found on EPA's Office of Federal Activities home page at: es.epa.gov/oeca/ofa/cumula.html. The guidance states that in order to assess the adequacy of the cumulative impacts assessment, five key areas should be considered. EPA tries to assess whether the cumulative effects analysis:

1. Identifies resources that are being cumulatively impacted (if there are none, then it should state this);
2. Determines the appropriate geographic (within natural ecological boundaries) area and the time period over which the effects have occurred and will occur;
3. Looks at all past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern;
4. Describes a benchmark or baseline;
5. Includes scientifically defensible threshold levels.

Throughout the document, you have identified resources that may be cumulatively impacted, but have not completed the other steps of the analysis. The DEIS alludes to past logging and human influences to natural resources on Gravina Island in numerous locations in the document but does not have a complete discussion of this topic anywhere in the text. Thus no geographical boundaries (besides the entire island) can be assumed or set, no level of past use is established, and hence no baseline can be set against which to measure future impacts.

CT-14

Roadless Areas

EPA is greatly concerned about the construction of roads in Inventoried Roadless Area 522 on Gravina Island. The roadless area officially comprises almost 38,000 acres, over 61% of the island, but as you note on Page 2-17, with the exception of the airport area, the entire island is basically roadless. With implementation of this timber sale, the resulting roadless area, would have shrunk to 44% of pre-project size, 21,000 acres, and would be split into two disjunct areas. Under Alternatives 2 and 3, roads would either be closed or decommissioned, so that motorized travel would not be possible. Under Alternative 2, maintenance would be performed, which would make it possible to reopen motor vehicle use at some time in the future. With both of these alternatives however, non-motorized travel would not be restricted, greatly increasing the recreational and subsistence use in this former roadless area. Under Alternative 4 motor vehicle access to formerly roadless portions of Gravina Island would cause a much greater increase in recreational and subsistence use, and in addition would cause significant impacts to deer and other wildlife habitat. Island populations would likely be unsustainable under the planned long term timber management cycle, especially given the substantial increase in sport and subsistence harvest that would result.

CT-1

CT-6 / 15

Maintaining open roads on National Forest lands would trigger significant cumulative impacts, which could include a sharp increase in economic activity (road building, significant levels of timber harvest, recreational use and possible residential, commercial, and industrial development) on the adjacent non-Forest lands. The EIS found these cumulative impacts difficult to quantify. Nonetheless, it is clear that opening maintained roads on Gravina Island would transform most of the island from an almost entirely roadless, isolated natural environment into a developing area. While some of these cumulative impacts might occur even if the Forest Service did not maintain open roads, clearly the selection of Alternative 4 would set into motion forces that would forever change the island's landscape.

Forest Roads

Forest roads are significant contributors to the degradation of the ecosystem as they negatively affect surface hydrology, sediment delivery to streams, habitat fragmentation, water quality, aquatic habitat, biodiversity, and predation. The draft EIS does not adequately assess the impact of roads to the aquatic environment (see Specific Comments, Page 3-49). The Forest Service enacted the Roadless Rule because of the negative environmental impacts associated with Forest roads, and its inability to maintain 60% of existing roads in the National Forest system (including the Tongass) to safety and design standards. The Roadless Rule proposed to exclude road construction and logging in existing roadless areas in the Tongass National Forest. Although the ultimate fate of the Roadless Rule is presently uncertain, the problems associated with Forest Roads, and Forest Service maintenance of those roads remain. Given the clear negative environmental effects of Forest roads, the high likelihood that the Gravina Island timber sale would result in the construction of new roads, and the continuing scarcity of funding to maintain even the current road system, the final EIS should indicate what impacts could occur if the Forest Service could not maintain all the roads proposed for this project (including stream crossings). Specifically, the EIS should discuss the long-term risks that may result from roads not removed upon completion of harvest activities (Alternatives 2 and 4) and then not adequately maintained. Assessment of risks is a necessary element of the disclosure requirements of NEPA, and an important part of an impact assessment. It is necessary so that the public and the Forest Service can fully evaluate the consequences of implementing the proposed project.

CT-16

CT-16

In order for your proposed roads to qualify for exemption from dredge and fill permit requirements under Section 404 of the Clean Water Act (the exemption of normal farming and silvicultural activities from permitting requirements), Best Management Practices (BMPs) listed at 40 CFR 232.3 must be applied. Included in these BMPs are the requirements that road fills shall be bridged culverted or otherwise designed to prevent the restriction of expected flood flow; that the design, construction, and maintenance of road crossings shall not disrupt the migration of aquatic life inhabiting a water body; and that all temporary fills shall be removed in their entirety and the area restored to its original elevation. These BMPs must be integrated into the design of the proposed project, described specifically in the EIS and committed to in the Record of Decision. If the BMPs are not implemented, and the roads are left for recreational purposes, they become un-authorized fills under Section 404 the Clean Water Act, and could be subject to enforcement by the Corps of Engineers (Corps) or EPA.

CT-16

Appendix B

Thus, we do not believe statements such as 'BMPs would be applied and therefore, impacts would not be significant' are adequate, given the information that has been developed by the Forest Service in pursuing the current roads policy reform effort and in particular, problems identified in recent road condition surveys conducted on the Tongass. We recommend that the final EIS commit to using road maintenance and closure procedures for this proposed project which are consistent with applicable state regulations and Forest Service direction.

The Forest Service, the Corps and EPA have been working together to resolve the applicability of exemptions granted under Section 404 of the Clean Water Act for forest roads and associated facilities (such as landings). Because Alternative 4 includes road construction where the roads will be open and maintained following harvest, and used for other activities not related to silviculture, the subsequent use of these roads would be subject to Corps authorization by issuance of a permit.

CT-16

For Alternatives 2 and 3, the Forest Service proposes road closures and the prohibition of motorized traffic. Without monitoring and enforcement of road closures, the potential for ongoing, unauthorized use of these roads appears high. Therefore the final EIS should describe how the Forest Service proposes to enforce this prohibition. The final EIS should more clearly identify specific road closure and maintenance practices to be employed should the proposed project ultimately be implemented. Road closure practices should be consistent with the Alaska Forest Resources and Practices regulations (11 AAC 95.320), which specify that roads should be closed by outsloping or water barring of road surfaces, leaving ditches in condition suitable to reduce erosion, and bridges, culverts and fills removed. In addition, Forest Service BMP 14.24 (Soil and Water Conservation Handbook, FSH 2509.22) specifies that all temporary and short-term roads are to be obliterated upon completion of their use. Road maintenance should be prescribed in a manner consistent with Forest Service BMP 14.20 and the Alaska Forest Practices regulations (11 AAC 95.315). Additionally, we recommend that a commitment to enforcement of administrative road closure orders appear in the ROD.

CT-16

Wetlands and Aquatic Resources

The Wetland Section does not do an adequate job of describing the wetland resources on Gravina Island, identifying wetlands are of the highest value, which perform the most important functions, where they are, and how timber harvest would impact wetlands, associated streams and water quality if the proposed action were implemented. As in other Sections, cumulative impacts are not adequately analyzed (please see Specific Comments below for additional information). Alternatives should attempt to identify impacts to all wetlands, and particularly rare or productive wetlands. We recommend that the EIS 1) define productive (i.e., high value wetlands), and 2) include a map of the project area that shows all wetlands, including those that meet the definition of high value. We also recommend that the EIS reconcile what was apparently done for the affected wetlands in this proposal; that is limiting protection or avoidance measures to riparian wetlands; with the overall aim of the Forest Road exemption, which is to protect *all* wetlands (BMP 232.3).

CT-5 / 24

Specific Comments

Page 2-16, Table 2-5: \$800.00 per year per road mile seems like a very low maintenance expense over time. Are transportation costs in Table 3-14 included here?	CT-7
Page 2-17 "Issue A, Economics": Discuss why Alternative 2 provides the most cost-effective timber supply. What are the savings?	CT-S
Page 2-17, "Component B" paragraph: a brief summary or reference to Chapter 3 discussion of long-term management and deer habitat would be helpful.	CT-S
Page 2-18, "Concern, Roadless" paragraph: The changes caused by events since late 2000 should probably be discussed in more detail here. The current text appears out of date. The disposition of the Roadless Area Conservation Rule is of great concern to us. Our understanding is that this draft EIS would not be in compliance with the changes required by the Rule. We further understand that the Forest Service must revisit the issue of wilderness designation for roadless areas in the Tongass as a part of a supplemental EIS on directed revisions to the Forest Plan.	CT-1
	CT-2
Page 3-10, Volume Strata paragraph: Briefly explain the functional differences between volume classes and strata as discussed in the Forest Plan.	CT-13
Page 3-13: Briefly explain the problems with using ground-based equipment on moist soil and steep slopes. Reviewers might imagine some of the problems, but the EIS should summarize past observations. Also, describe why the use of running skyline has replaced highlead cable systems.	CT-24
Page 3-15, Table 3-5: Why does alternative 5 not include more of the timber units at AYD 2200' that the other alternatives use? Excluding the harvest of this timber would seem to increase the cost of helicopter yarding considerably.	CT-S
Page 3-17: Table 3-7: Why aren't road maintenance costs included? Are fuel costs included for all alternatives? Also, explain broadly how you made your choices for cable or helicopter yarding. This is important to our understanding of how you arrived at your action alternatives.	CT-7
Page 3-18, 4 th paragraph: Was an attempt made to control costs with shorter yarding distances for alternatives other than Alternative 2, principally Alternative 5?	CT-S
Page 3-20: A point of clarification on table 3-10: Are employment estimates based on maximum usage of roads for logging on non-Forest Service lands? It is difficult to know how to interpret these figures otherwise.	CT-S
Page 3-21: It would be very useful to include costs to the government in Table 3-11, by alternative.	CT-S

Appendix B

Page 3-22, Table 3-12: Are road construction and maintenance costs (from Tables 2-5 and 3-12) included in direct project costs?	CT-7
Page 3-24, and 3-25 Alternative 4 paragraph: The residents of Metlakatla must currently have <i>enough</i> access to the resources if the resources are important to them. Or put another way, they currently have less access than people in Ketchikan and Saxman because they are farther away, and that wouldn't change if the roads were put in.	CT-15
Page 3-26: Affected Environment: This section should describe more clearly, if known, what resources the residents of Metalaktla currently use and at least an estimate of how much they use them.	CT-15
Page 3-28, 2 nd full paragraph: The Forest Service should commit to doing archeological monitoring in the Final EIS. How will you avoid archeological sites?	CT-4
Page 3-30-3-31. There is no impact analysis done in this Section. You need to compare the impacts from constructing and managing transportation comparatively for each alternative. Some of the discussion can be taken in summary form from other sections of Chapter 3. This comment also applies to the Watershed discussion on page 3-49.	CT-16
Page 3-37 (1 st paragraph): The discussion of structural embankments is confusing. You should lay out different types of design components clearly and disclose what the environmental pros and cons are.	CT-19
Page 3-44: Watershed Assessment Summary: What is the relative significance of these impacts?	CT-S
Page 3-45, Table 3-19: Explain why "other watersheds" were excluded from a Watershed Assessment analysis.	CT-S
Page 3-48 and 3-49, Road Summaries: You cite a total of 34, 13 and 36 mapped stream crossings in Alternatives 2-4, respectively, yet there is no assessment of impacts to aquatic resources. The final EIS should include such assessment by alternative. Also, under Alternative 3, the DEIS states that "Specified roads in Alternative 3 will be placed in <i>Maintenance Level 1</i> after harvest and silvicultural activities have concluded. Vehicle traffic will not be allowed, <i>some pipes may be removed</i> , and the road will be placed into storage in as maintenance free a condition as possible" (emphases added). However, elsewhere, the DEIS indicates that under Alternative 3, all specified roads would be "decommissioned," which would involve the removal of all drainage structures, not just some. This needs to be clarified in the FEIS.	CT-5
Page 3-49, Cumulative Effects section: Cumulative Impact analyses need not be quantitative. However, an assessment still must be done. In January 1997, CEQ published <i>Considering Cumulative Effects Under the National Environmental Policy Act</i> , a guidance document that provides a framework for analyzing cumulative effects (See discussion and reference to EPA's cumulative impact guidane on Page 2, above).	CT-14

Page 3-51: The discussion in the "Other Landowners" paragraph should have been done in the Transportation section.	CT-S
Page 3-54, Monitoring: You should make an attempt to locate a suitable monitoring site on Gravina Island, or explain how information from a channel off the Island can legitimately be extrapolated to assess resources on the Island.	
Page 3-60, paragraph 2: Is there really no way to estimate how many people use the interior of Gravina Island for recreation? In the previous paragraph, it appears you have some idea of demand as you imply that improving access might be seen as desirable.	CT-6
Page 3-61, ROS Classification: The total roaded areas would increase, but from what to what?	CT-S
Page 3-62: Would the Forest Service commit to providing additional law enforcement presence? What would be the mechanism for compliance?	CT-16
Page 3-66: The National Roadless Area Conservation Rule is not well explained, particularly the parts which discuss Social and Economic Mitigations. Why would Alternative 3 be combined with Selected Social and Economic Mitigations under the National Roadless Area Conservation Rule, but other alternatives would not? We are aware that some alternatives may be modified as a result of the Rule.	CT-S
Page 3-79: 2nd paragraph: Would heavy industrial development be caused or facilitated by Forest Service Roads?	CT-S
Page 3-83: Alternative 2-4: What are the BMPs you plan to use? What form will your commitment to doing them take?	CT-S
Page 3-84: Cumulative Impacts paragraph: This is not a cumulative impacts analysis. You need to make an attempt to assess the sensitivity of the resource, even if qualitative, to all past, present and reasonably foreseeable future actions. See discussion on Page 2 above for suggestions on how to change this Section and other cumulative impact sections in the document.	CT-S
Page 3-85: first paragraph: Section 404, regulates discharges into <i>all</i> waters of the U.S., <i>including</i> wetlands, not just into wetlands (except, in this case, where the silviculture and other 404(f) exemptions apply).	CT-S
Page 3-87, Roads on Wetlands: Describe the rock overlay construction techniques that maintain wetland functions and how they do that.	CT-S
Page 3-88: Cumulative Impacts section: A forecast of future effects is a part of a cumulative impacts analysis. However, there is no description of what these effects you are describing might be, whether they are significant, and why. Also it is not clear what your basis for the 50% ratio is. An explanation should be given. Your baseline description on the previous pages, from which	CT-S

Appendix B

your cumulative impacts analysis starts, does not include an assessment of the existing condition of the resource and the effects, or present stresses, if any, on that resource (wetlands) to date. This Section and the previous section do not identify what wetlands have highest value, where some of the highest value wetlands might be located, and what other aquatic functions might be affected. Review of the Unit and Road Card Sections in Appendix B in an attempt to get locations, quantity and size for wetlands showed a discrepancy between the two: the Unit Cards showed riparian areas, but did not show other wetlands, while the Road Cards showed wetlands. In communication with Forest Service staff, we understand that you made a determination that you would consider riparian wetlands and wetlands adjacent to riparian areas as most valuable, but we recommend that you place all wetlands on the Unit Cards so that reviewers can understand where impacts would occur.

CT-S

Page 3-89, Harvest on Wetlands: This paragraph implies but does not mention increased runoff as timber is harvested from wetlands. Will this cause increased runoff? Where might some of the problem areas be? How long might some of these effects last?

CT-S

Page 3-89: Cumulative impacts are stated here, but again, there is no discussion about whether they are significant and why. The figure given for harvest by other landowners is up to 575 acres, which is not much less than the direct impacts on Forest Service lands (723 acres). Will this impact exceed thresholds for the resource?

CT-S

Page 3-96, 2nd to last paragraph: The benefits of thinning last about 10 years. When is thinning normally done? How often will pre-commercial thinning be done in one stand, and will it occur periodically over the course of the rotation?

CT-S

Page 3-97: Scattered throughout Chapter 3 are references to past human impacts on timber resources, including Table 3-34. In other places, there are references to logging that has occurred on private lands or Forest Service lands in the past. All these references should be brought together into one Section and discussed, so it is clear what past impacts the resource has experienced, and all past causes and effects can be characterized.

CT-S

Page 3-98: Final paragraph: You must explain why the measures dictated by your Forest Plan guidelines are sufficient for you to conclude that there will be no significant impacts to old growth habitat connectivity and wildlife viability on Forest Service lands on Gravina Island. Just saying that they are without supporting your conclusions is not sufficient.

CT-11

Page 3-104: If the Bostwick Creek bridge is a potential problem, the Forest Service should either decide to move the bridge and commit to it in the EIS, or commit to any necessary contingencies associated with impacts to loose-flowered bluegrass.

CT-S

Page 3-120: Based on your statements that marten density may be reduced by as much as 90 percent when road densities approach .6 miles per square mile, Alternative 4 is likely to have a significant impact to the species. Is this correct? What is your assessment?

CT-S



THE WILDERNESS SOCIETY

June 26, 2001

Jerry Ingersoll
District/Monument Ranger
Tongass National Forest
3031 Tongass Ave.
Ketchikan, AK 99901
(fax) 907-225-8738

Attn: Gravina Island Timber Sale

Dear Mr. Ingersoll:

Please accept the following comments submitted by The Wilderness Society (TWS) on the Gravina Island Timber Sale Draft Environmental Impact Statement. Founded in 1935, The Wilderness Society is a non-profit conservation organization with 200,000 members nationwide. TWS is committed to preserving wilderness and wildlife, establishing a nationwide network of wildlands, and fostering an American land ethic. We have a long history and strong commitment to the sound management of our National Forests and in particular, the extraordinary wilderness and wildlife values of the Tongass. Many of our members fish, hunt, bird, hike, camp, kayak and recreate in this remarkable forest.

TWS strongly recommends the Forest Service adopt the No Action alternative and stop any further planning or action on this sale or other sales in the inventoried roadless areas on the Tongass.

CT-12

Violation of the National Roadless Area Conservation Rule

The proposed Gravina Island Timber Sale located within a 37,000 acre, pristine roadless area in the heart of the Tongass National Forest is in direct violation of the Roadless Area Conservation Rule and the U.S. Forest Service's stated commitment to protect roadless area values. The Roadless Area Conservation Rule preserves our remaining wild forests by restricting logging and road building on the 58.5 million acres of inventoried roadless areas on the National Forests including the 9.3 million acres of roadless areas within the Tongass.

CT-1

This historic policy reflects over 600 hearings held nationwide and 1.6 million comments submitted by the American public in the course of the nearly three year intensive nationwide public process that led to it's final adoption on January 12, 2001.

ALASKA REGION

430 WEST 7TH AVENUE, ANCHORAGE, AK 99501
TEL. (907) 272-9453 FAX (907) 272-1670

Appendix B

TWS Gravina Island Comments

Irreparable Harm to Wilderness, Historical, Cultural and Recreational Values

Roadless areas are crucial to the protection of our nation's wildlife, fisheries and water resources. This is particularly true for the Tongass, which represents the largest remaining intact tract of old growth temperate rainforest in the world. The national roadless policy was developed because although roadless areas have great national value as sources of clean water, recreation and habitat, local planning did not adequately conserve them. Local planning decisions on the Tongass have historically allowed logging primarily on the most productive lower elevation forest lands eroding forest diversity and fish and wildlife habitats.

Clear-cutting and road building on Gravina Island and other roadless areas on the Tongass will continue this pattern, threatening critical fish and wildlife habitat including that of the Alexander Archipelago wolf; coho, chum and pink salmon; black bear; Sitka black tailed deer; and nesting bald eagles. In addition to the irreplaceable harm this sale will have on wilderness resources, the sale poses great threat to the historical, cultural and recreational values of this area. The timber sale will harm the nearby native communities traditional hunting, fishing, and plant gathering activities. The sale area also contains significant Alaska native historical and cultural resources including sacred burial sites and historic fishing camps dating back more than 3,000 years, which could be damaged or lost by the proposed development.

CT-5

CT-6

CT-4

Requirement to Consider Roadless Areas as Wilderness

In addition, the Forest Service is under court order to prepare a supplemental Environmental Impact Statement (EIS) that evaluates all Tongass roadless areas, including Gravina, for their respective suitability as Wilderness. Until the Forest Service completes the supplemental EIS, it is premature for the Forest Service to make any decisions on roadless areas especially if the proposed action causes irreparable harm.

CT-2

National Roadless Area Conservation Rule Ensures Necessary Balance

The Roadless Area Conservation Rule carefully maintains a balance between National Forest lands valued for recreation, subsistence and the national need for timber. Fifty one percent of our National Forests are now open to logging, mining and drilling. Protecting roadless areas on the Tongass would not eliminate commercial forestry. There are already at least 4,650 miles of permanent roads within the Tongass and timber available to support small-scale industry from the existing road network.

Although Gravina is the first roadless area faced with a timber sale under the new roadless policy, other important roadless areas deserving protection include: Three Mile on Kuiu Island, Moira Sound and Cholmondeley on Prince of Wales Island, Finger Mountain on Chichagof Island and Cape Fanshaw on the mainland coast.

TWS Gravina Island Comments

The Forest Service should immediately order a halt to the Gravina Island sale, as well as the five additional Tongass roadless sales that are proceeding in direct violation of the Roadless Rule and that threaten the legitimacy of the supplemental EIS process.

The protection of our last wild forests is a core American value. The American people resoundingly voiced their support throughout the extensive public process that developed the National Roadless Area Conservation Rule and will do so again. TWS will continue to work to ensure that the Forest Service's final policies reflect the public voice and the sound science that call for the permanent protection of roadless areas in our national forest system.

Sincerely,



Eleanor Huffines
Alaska Representative
The Wilderness Society

Cc: USDA Forest Service Chief Dale Bosworth

Appendix B

A non-profit organization dedicated



to maintaining our wildlife heritage

June 26, 2001

Jerry Ingersoll
District/Monument Ranger
Attn: Gravina Island
3031 Tongass Avenue
Ketchikan, AK 99901
FAX: 907-225-8738

RE: Proposed Roadless Area Timber Sale on Gravina Island, Tongass National Forest

Dear Mr. Ingersoll:

Wildlife Forever is the non-profit conservation arm of the North American Hunting Club and North American Fishing Club whose members total 1.3 million Americans.

Wildlife Forever supports the "no-action alternative".

| CT-12

We strongly oppose the proposed Gravina Island roadless area timber sale in the Tongass National Forest.

| CT-1

No one has ever made a convincing case that clearcut logging the Tongass' old growth temperate rainforest helps fish and wildlife species. Instead, such logging:

- degrades habitat important to many species
- detracts from the immense enjoyment Americans derive from recreating in the Tongass
- destroys roadless area values which Forest Service Chief Dale Bosworth has pledged to defend
- almost always requires a taxpayer subsidy.

| CT-5

| CT-6

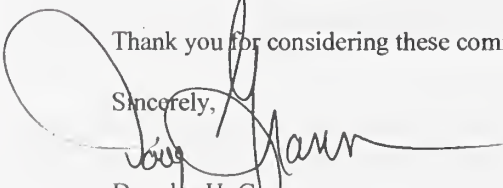
| CT-1

| CT-7

Given the priorities of Wildlife Forever's members and the wishes of the vast majority of Americans, it is past time to stop ravaging the Tongass National Forest on money losing timber sales in roadless areas.

Thank you for considering these comments on behalf of our members.

Sincerely,


Douglas H. Grann
President & CEO

DHG/dmc

10365 West 70th Street • Eden Prairie, MN 55344 • (952) 833-1522, Fax: (952) 833-0804



JUN-26-01 TUE 08:27 AM KTN SO
JUN-25-2001 08:147 PM TCS.

FAX NO. 086
1 907 225 5827

P. 01
P. 01

PAGE 1

JERRE INGLIS
DISTRICT MANAGER USFS
ATTN: GRAVINA ISLAND
8031 TONGUE AVE KTN AK99601

COMMENT ON GRAVINA IS. DEIS

THERE SHOULD BE NO ROADS OR LOGGING ON THE SLOPES THAT DRAIN INTO BOSTWICK INLET. THIS ENTIRE AREA IS A MAJOR COMPONENT OF THE REGIONAL PEOPLE'S SUBSISTENCE ECONOMY. IT IS A CULTURAL & TRADITIONAL SUBSISTENCE HARVESTING AREA FOR THE NATIVE COMMUNITIES. AND THE ECOLOGICAL BALANCE OF THIS AREA IS VERY VULNERABLE & NEEDS PROTECTION.

CT-3

FOR THE SAME REASONS THERE SHOULD BE NO LOG TRANSFER SITE IN BOSTWICK WATERS.

CT-3

THE LETTER DATED JUNE 19, 2001 FROM THE KETCHIKAN GATEWAY BOROUGH FALSELY PRESENTS THE INTERESTS & ARGUMENTS OF SOME TIMBER CORPORATIONS AS THE NEEDS OF THE PEOPLE OF KETCHIKAN. THIS FAR SUCH ARGUMENTS HAVE BEEN ACCEPTED AND HAVE RESULTED IN DESTROYING OUR NATURAL ASSETS AND NOT ONCE PROVIDING A FAIR AND SUSTAINABLE RETURN TO THE WORKING PEOPLE OF OUR COMMUNITIES.

CT-7

Appendix B

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PAGE 2

FURTHER MORE THE STATEMENTS IN THE BOROUGH'S COMMENTS MADE ON BEHALF OF UNSCRUPULOUS INVESTORS GROSSLY OVERESTIMATES THE TIMBER THAT COULD COME FROM GRAVINA TO JUSTIFY ROADS & FURTHER LOGGING ELSEWHERE. AT THE SAME TIME IT UNDERESTIMATES THE DAMAGE THAT WOULD BE DONE. FINALLY, AS USUAL, "ECONOMICALLY FEASIBLE TIMBER" IS USED PURELY AS A BUSINESS TERM WITH NO CONCERN GIVEN TO SUSTAINABLE LIVING WAGE JOBS FOR THE COMMUNITY.

CT-7

THIS TIME I SUSPECT IT WOULD BE BETTER FOR YOU TO FOLLOW THE LOGIC OF MOTHER NATURE & THE UNHEARD VOICES OF WORKING PEOPLE, NATIVE & NON-NATIVE COMMUNITY INSTEAD OF THE REPS OF RAPE.

GEORGE WINTER
PO BOX 6642
KTN AK 99601
247-4325

Jerry Ingersoll
Ketchikan District Ranger
June

26, 2001

Attn: Gravina Island Project Area

Comments regarding the proposed Gravina Island Timber Sale

Dear Mr. Ingersoll,
Please accept these comments as my official testimony on the Gravina Island Timber Sale.

I have been a resident of Southeast Alaska since 1985. I have lived primarily in Sitka but have worked in a number of different locations throughout the Tongass during the last 15 years. For five years I was a fisheries biologist for NSRAA, during which I worked in many parts of the Tongass. I am adamantly opposed to any timber harvest on Gravina Island.

I request that you choose Alternative 1 - the No-Action alternative.

I am concerned about the following impacts from this proposed project:

* Clearcutting and road building will have significant negative impacts on the area's populations of Alexander Archipelago wolf, Sitka black-tailed deer and bears. When all of the clearcuts have completely grown-in to a closed canopy state and become biological deserts, black bears, deer and wolves will not have enough habitat to maintain sustainable populations.

CT-9

* All of the sale is proposed in inventoried Roadless Areas, which are protected under the national Roadless Area Conservation Policy. These roadless areas are vital for fish, wildlife, recreation, subsistence, and biodiversity. The Forrester Service should not be proposing clearcutting in roadless areas.

CT-1

* The Tongass timber program loses huge amounts of taxpayer's money every year. This sale will only result in more losses to the US Treasury. The high cost of building roads, planning and administering sales, and the current low market values of timber will combine for yet more loss to the US taxpayers.

CT-7

* Building additional roads will only cause the loss of more spawning and rearing habitat for commercially valuable salmon populations. Much of the fisheries work I did on the Tongass was trying to restore lost spawning habitat that had been lost because of past logging. It would be much more cost-effective to not damage the streams to begin with. The Tongass already has a huge backlog of stream crossings (bridges and culverts) that are death traps for salmon and trout. This sale would only add to that big problem.

CT-5 / 16

* This project will harm the wilderness characteristics of the area's pristine roadless areas and make more of them ineligible for consideration as Wilderness.

CT-2

* This area is much more valuable to the local and national economies for its long term wilderness/recreation values than for its short term, one-time timber values.

Thank you very much for the opportunity to comment. Please drop this sale from further consideration.

Brian McNitt
Alaska Rainforest Campaign
201 Lincoln St. #1
Sitka, Alaska 99835
(907)747-8292
bmcnitt@akrain.org

winmail.dat

Forest Service Response to Comments, by Type:

Comment Type 1: Roadless Rule

Many comments focused on the roadless character of Gravina Island. These included concerns that proceeding with the project violated the national roadless rule, and that the analysis did not adequately consider the importance of roadless character. This topic is discussed in the Final EIS, Chapter 3, section titled Roadless Area. Examples of some comments included:

All projects should be put on hold until the roadless rule is decided.

The Roadless Area Conservation Rule (January 12, 2001) generally prohibited timber harvest and road construction in inventoried roadless areas. On December 30, 2003 after analysis of current conditions in SE Alaska and public comment on the proposal, the Department amended the roadless rule so that actions on the Tongass National Forest are not subject to the prohibitions (against commercial timber harvest and roadbuilding) in the roadless rule. Therefore, the Gravina Island Timber Sale project can at this time proceed.

Roadless area concerns are not considered to be significant in the Draft EIS.

When scoping first began for this project in 1999, the roadless area concerns were not as prevalent as they later became. As project analysis continued and comments from the Draft EIS were evaluated, it became apparent that a much harder look at the impacts of the alternatives on the roadless area was needed. Roadless concerns have been re-categorized as a “significant” issue in the Final EIS.

Comment Type 2: Forest Plan does not protect Wilderness Character

The preservation of wilderness characteristics on Gravina Island was a topic of some letters. These comments suggested that logging would damage those characteristics, and questioned whether the Forest Plan LUDs are adequate to protect them. They also commented that the Gravina Timber Sale project should not proceed until the Forest Plan Supplemental Environmental Impact Statement (SEIS) was completed. This was accomplished in February 2003. Following is an example of this concern expressed:

Wilderness characteristics on Gravina Island would be permanently destroyed by logging.

As part of the analysis for the Gravina Timber Sale, Forest Service IDT personnel worked simultaneously with the Forest Plan SEIS team in evaluating the eligibility of inclusion of the Gravina Island Inventoried Roadless Area in the wilderness system. The existing wilderness attributes of Gravina Roadless Area 522 are described in detail in the Forest Plan Supplemental EIS (Volume III, Appendix C, Page C2-482). Potential effects of the project alternatives on the roadless character and wilderness attributes of the Gravina roadless area are discussed in the Roadless Area section of Chapter 3 of this Final EIS.

Comment Type 3: Impacts on Traditional Use/Impacts to Bostwick Inlet

Potential impacts of the project on traditional use of Gravina Island, especially in Bostwick Inlet was a concern raised by many people. The issue of subsistence is closely related to traditional use, and Bostwick Inlet has traditionally served as an accessible and protected area for people to harvest both marine and land-based resources. People are concerned that any activity in Bostwick Inlet could permanently affect those resources, or increase access to the point that their abundance would diminish over time. The Subsistence, Heritage, and Environmental Justice sections of Chapter 3 of the Final EIS discuss how the Forest Service considered impacts on traditional and subsistence uses. Concerns included the following:

Alaska Native traditions, spiritual health, and cultural considerations are directly related to subsistence issues and uses.

Bostwick Inlet, Bostwick Valley, and its surrounding near shore areas are important areas for the subsistence and personal harvest of food and other items for cultural and family needs.

There should not be a log transfer facility, barge drop or logging road in the Bostwick Inlet area.

Concerns were expressed over the development of areas that hold familial and traditional values. Traditional uses and subsistence resources, especially in Bostwick, were considered throughout the planning for this project and identified as an important issue early in the process by many people. Alternative 3 in the Draft EIS was originally designed to minimize impacts to Bostwick Inlet. Alternative 6, a modification of Alternative 3, was added between the Draft and Final EIS in response to comments received that Alternative 3 didn't go far enough in protecting critical deer winter habitats and habitats in the Bostwick Creek watershed.

Alternative 2 is the only alternative that proposes a road near and a log transfer facility in Bostwick Inlet. That road and LTF would be decommissioned after timber harvest, including removal of culverts and bridges. Access management, which involves road closures, is displayed by alternative in the Transportation section of the Final EIS. Alternatives 3, 4 5, and 6 do not build any road, bulkhead, or facility in Bostwick Inlet, and only propose temporary use of a self-contained boom bag barge drop in Bostwick Inlet, which minimizes the amount of bark that is deposited in to the water, and reduces impacts to subsistence resources.

There is hardly anything regarding where Metlakatla stands with this controversial project. It appears that all roads for a log storage dump lead to Bostwick.

Metlakatla has been involved early and often in this planning process. Metlakatla helped the IDT identify issues with the timber sale proposal. In particular, many people expressed concern with effects of harvesting and road building on the subsistence resources that were very important to them (see Final EIS, Appendix C, Subsistence Hearings). Alternatives 3 and even more so 6 were designed to address many of these issues. As shown in the alternative maps at the end of Chapter 2 in both the Draft and Final EIS, neither of these alternatives proposes the building of an LTF or a road terminus in Bostwick Inlet; in fact, only Alternative 2 makes that proposal.

Bostwick is State-designated for subsistence only.....this is not a concern for the Forest Service. They are looking for other areas that can be declared "subsistence only" to replace Bostwick.

The Forest Service makes every attempt to coordinate its management plans with those of other agencies and is very concerned with protecting subsistence resources. The Forest Plan designates where timber will and will not be harvested on NFS land, but does not have a subsistence-only land use designation. Instead, the Forest Service holds subsistence hearings, and takes public comments. These comments and testimony are used to help formulate project alternatives. See Appendix C, Subsistence Hearings.

While subsistence is an important concern to many people, especially in Bostwick, there are no subsistence-only restrictions on areas or resources on Gravina Island or in Bostwick Inlet. Alternatives 3 and 6 are designed to have minimal impact on Bostwick Inlet. Alternative 3 proposes to harvest only two units in the vicinity of Bostwick Inlet, both by helicopter. Alternative 6, which was developed between the Draft and Final in response to subsistence concerns, proposes no harvest or road building within the vicinity of Bostwick Inlet. Neither alternative places an LTF in the inlet and both call for road closure upon completion of silvicultural activities, which would reduce impacts from deer hunters.

This is to express my concerns for environmental impacts to Bostwick Cove and stream drainage.

In past occurrences, trees were cut to the edge of the stream banks and erosion resulted. Current Forest Plan Standards and Guidelines specifically require stream protection buffers. The Gravina Island Timber Sale unit designs incorporate these Standards and Guidelines (Gravina Island Final EIS, Chapter 3, Watersheds and Fisheries).

Comment Type 4: Impacts on Historical and Cultural Sites

Gravina Island contains documented historic and culturally important sites. The Forest Service received comments expressing concern that these sites might not be adequately protected from either direct or indirect impacts of the project. Laws and regulations exist to help ensure the protection of these sites (see the section titled Heritage Resources in Chapter 3 of the Final EIS). Included here are examples of some of the comments received:

Archeological sites and gravesites in the area would be threatened by additional presence from access by unknowledgeable or disrespectful people. How will the protection for historic sites be guaranteed? Archaeological treasures must be catalogued before road layout or road building. The preferred alternative provided inadequate protection for cultural heritage sites and subsistence areas.

Extensive investigations, which included researching the available literature regarding the history, prehistory, and cultural use of Gravina Island, interviews with knowledgeable people from the communities of Saxman, Ketchikan, and Metlakatla, and field investigations conducted between 1998 and 2000, resulted in the documentation of 39 historic and prehistoric sites within the project area. Ten of these sites were determined to be eligible for the National Register of Historic Places. These significant sites would not be affected by any direct effects of the proposed activities, as they are located in areas protected by the 1,000-foot beach and estuary buffer where no proposed roads or timber harvest units are located. The potential for indirect effects resulting from increased visitation is minimized by keeping the locations of significant sites confidential, by periodic site inspections to monitor condition, by directing public activities away from sensitive site areas, and through law enforcement surveillance techniques. Should any previously undiscovered cultural resource be located during the proposed activities, work in the vicinity of the resource would cease until the resource is evaluated for significance and protected through the processes established in the National Historic Preservation Act and the implementing regulations provided by 36 CFR 800, as amended.

Comment Type 5: Impacts on Fish and Wildlife Habitat

Many commenters stated that habitat important to maintain fish and wildlife should be protected, or suggested that timber harvest could enhance wildlife habitat. Many people were concerned with the impacts of timber harvest and roadbuilding on water quality and fish habitat, as well as on marten, goshawk and deer habitat. Effects to these resources are discussed in the Final EIS Chapter 3 sections titled Watersheds and Fisheries; Biodiversity and Old Growth; and Wildlife. Some examples of these concerns include the following:

Logging on Gravina Island would destroy valuable fish and wildlife habitat.

The Forest Plan contains Standards and Guidelines designed to ensure the protection of fish and wildlife habitat while permitting timber harvest. These Standards and Guidelines are structured by the level of sensitivity of the resource (e.g., riparian management areas are larger on fish-bearing streams than non-fish-bearing), and the existing level of impacts (e.g., larger reserves are required for marten habitat in Value Comparison Units with 33 percent harvest).

Helicopter-only harvest or No Action should be selected for this project to minimize impacts to important goshawk habitat.

The Gravina Island project proposes application of two-aged and uneven-aged prescriptions for those units in the area where the goshawks sightings have occurred. These prescriptions were designed specifically to meet the standards and guidelines assigned to protect American marten and Northern goshawk. Wildlife analysis done for both the Forest Plan and for the Gravina Island Timber Sale project show that island populations would be sustainable under all alternatives. Survey results and effects on goshawk are summarized in the Threatened, Endangered and Sensitive Species section in Chapter 3 of this Final EIS, and effects on marten habitat are summarized in the Wildlife section. More detailed information is available in the Gravina Island Wildlife Resource Report in the project planning record.

Helicopter-only harvest or No Action should be selected for this project to maintain the viability and distribution of marten on Gravina Island.

American marten are one of the Management Indicator Species (MIS) analyzed for Gravina Island (Final EIS, Ch. 3, Wildlife section); the potential impacts of the project alternatives on marten habitat (high-volume stands below 1,500 feet in elevation) were carefully analyzed. While Alt. 1 (no harvest or roadbuilding) and Alt. 5 (least harvest and no roadbuilding) result in the least impact to marten habitat capability (see Table 3-60 in the Ch. 3 Wildlife section), none of the action alternatives are expected to threaten the overall viability and distribution of marten on Gravina Island, with the implementation of Forest Plan Marten Standards and Guidelines. For a complete discussion, see Final EIS, Ch. 3, Wildlife section, "American Marten".

More acres being harvested would provide more young stands for greater diversity and wildlife habitat.

An alternative that harvested additional timber from the suitable timber base was considered and eliminated during the development of alternatives for the Draft EIS. As stated in the Draft EIS, and in Chapter 2 of the Final EIS under "Alternatives Considered but Eliminated from Detailed Study", approximately 6,802 acres (132 MMBF) of suitable forest that met Forest Plan Standards and Guidelines could have been included in the potential unit pool. Approximately 4,584 acres (95 MMBF) were not included in any of the alternatives because the units would have been too small to harvest economically, the risk to resources was too high for the volume harvested, or the unit was too far from other areas to harvest economically.

Harvested areas have some value for deer associated with the increase in forage seen shortly after harvest. However, when canopy closure occurs approximately 25 years after harvest, forage production drops significantly due to the lack of sunlight reaching the forest floor. At this point, the habitat value for deer goes almost to zero because food is scarce in these stands. See Final EIS, Chapter 3, Wildlife section, "Sitka Black-tailed Deer" for discussion on the effect of harvest on habitat capability, and Subsistence section, "Direct and Indirect Effects, Deer Distribution and Abundance".

There is little evidence that lack of connectivity poses a threat to most vertebrate species in western forests. Some studies noted little use of corridors.

Habitat corridors are discussed in the Final EIS Chapter 3, Biodiversity and Old Growth section, under the paragraphs titled "Habitat Corridors and Connectivity" and "Effects to Habitat Corridors and Connectivity".

Project alternatives are designed in accordance with Forest Plan Wildlife Standards and Guidelines, which direct us to design projects to maintain landscape connectivity (Forest Plan Wildlife Standards and Guidelines, section XVIII, Landscape Connectivity). The maintenance of habitat corridors between blocks of old-growth forest can be achieved through beach,

estuary, and riparian buffers and Old-growth Reserves, as well as other areas deemed inoperable for timber harvest because of unstable soils, steep slopes, economic isolation. In the Gravina Island project area, approximately 64 percent (12,155 acres) of the current POG and 72 percent (4,405 acres) of the current high-volume POG is protected in OGRs, beach, estuary, and riparian buffers, and in other LUDs not suitable for timber harvest.

Helicopter-only harvest or No Action should be selected for this project to maintain the integrity of fish habitat and water quality.

Gravina Island includes eleven watersheds (see Figure 3-4 in the Final EIS, Ch. 3, Watersheds and Fisheries section). Of these, the six watersheds that contain at least a 3rd-order stream system and anadromous or resident fish were analyzed for this project. Forest Service fisheries biologists carried out stream surveys in these watersheds in 1999 and 2000 to identify stream classes and fish species, note management concerns, and determine the Sediment Risk Index (a score that shows the relative risk of sediment transport among watersheds) for each watershed.

Alt. 1 (no action) and Alt. 5 (the least harvest and no roadbuilding) would have the least impact of all the alternatives on fish and water resources (Final EIS, Ch. 3, Watersheds and Fisheries section, "Direct and Indirect Effects"). On all alternatives, applicable Forest Plan Standards and Guidelines include a number of mitigation measures, such as riparian (stream) buffers, bridge and culvert design standards on stream crossings to provide fish passage, and fish timing restrictions for Class I (and sometimes Class II and III) streams. With the implementation of these Standards and Guidelines, and application of Best Management Practices, we anticipate no detectable effects on fish habitat from implementation of this timber sale.

For more detailed discussion of the effects by alternative, see the Final EIS, Ch. 3, Watersheds and Fisheries section. Stream crossing and stream buffer information is also contained in Appendix B of the Draft EIS, Unit and Road Cards.

You fail to meet the requirements under findings for Essential Fish Habitat.

According to the agreement between the National Marine Fisheries Service (NMFS) and the Forest Service dated August 25, 2000, the Essential Fish Habitat assessment will include 1) a description of the Proposed Action; 2) an analysis of individual and cumulative effects of the action on EFH, the managed species, and associated species such as major prey species, including affected life histories; 3) the Forest Service's views regarding effects on EFH; and 4) a discussion of proposed mitigation, if applicable. The Draft EIS addresses these four topics on page 3-50 in the Watersheds and Fisheries section of Chapter 3, and also in the Final EIS Chapter 3 Watersheds and Fisheries section.

The Essential Fish Habitat (EFH) determination of "*may adversely effect EFH*" in the Draft EIS initiated the official consultation process between the USFS and the National Marine Fisheries Service (NMFS). This determination, with which NMFS concurred, acknowledged to NMFS and the public that an adverse effect to Essential Fish Habitat may occur as a consequence of our management activities. As stated in the Draft and Final EIS, we believe the risk of adverse effects occurring to Essential Fish Habitat are minimized through the application of Forest Plan Standards and Guidelines on this project. At this point, formal Essential Fish Habitat consultation is complied with, in accordance with the agreement between the Forest Service and the National Marine Fisheries Service.

How are fish timing and mitigations addressed?

Timing windows, as applied to streams that contain salmon or steelhead, are required by an agreement between the State of Alaska and the U. S. Forest Service in Region 10. During project development, streams with salmon or steelhead are identified and appropriate timing windows are listed on the road cards in Appendix B in the Draft EIS. Timing windows are determined through site-specific surveys at each proposed stream crossing, and in accordance with the Aquatic Habitat Management Handbook (Forest Service Manual), that provides timing windows for northern, central, and southern SE Alaska. Work can only be done outside timing windows if both the State of Alaska and the Forest Service agree to the mitigation measures, and when the resource can be adequately protected.

Is there a plan for maintenance or enhancement of aquatic productivity?

Chapter 1 of the Draft EIS described a list of desired future conditions for NFS lands on the project area. The three primary land use designations on NFS land on Gravina Island are Timber Production, Scenic Viewshed, and Old-growth Habitat, which have some differing management objectives (Forest Plan, Ch. 3, Management Prescriptions), but share the same Forest-wide Standards and Guidelines. For resources such as Fish, Riparian, and Soil and Water, these Standards and Guidelines include objectives such as "Maintain or restore the natural range and frequency of aquatic habitat conditions on the Tongass National Forest to sustain the diversity and production of fish and other freshwater organisms" (Fish S&Gs, page 4-9; Riparian S&Gs, page 4-53). Maintaining or restoring water resources is achieved through implementing Standards and Guidelines during project activities; see the Unit and Road Cards in Appendix B of the Draft EIS for site-specific application of mitigation measures, such as RMA buffers, and bridge, culvert, and fish-timing measures specified on stream

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crossings. See also the Final EIS, Chapter 3, sections titled Watershed and Fisheries; Soils; and Wetlands and Floodplains for discussion of aquatic resources.

There is no assessment of roadbuilding impacts to aquatic resources.

See the Final EIS, Chapter 3, Watersheds and Fisheries section, "Effects of Roads" for a discussion of effects of roads and stream crossings on aquatic habitat.

In the Draft EIS, why are Fish Habitat and Water Quality listed under "Other Concerns" not considered to be significant issues?

As stated in the Draft EIS (p. 1-14, Issues) the "significant issues" were identified through public and internal scoping, and alternatives to the proposed action were developed to respond to these issues. All comments were reviewed for their merit and substantive suggestions were incorporated.

The "Other Concerns" that are considered are already addressed through other processes, or in the Forest Plan, or their resolution is beyond the scope of the project (Draft EIS p. 1-15). As stated in the Draft EIS, fish habitat and water quality is one of the concerns that is tracked throughout the Draft EIS (p. 1-14). This concern is addressed through a description of impacts and mitigation for each alternative (p. 1-15). Fish habitat and water quality are resources that are analyzed for potential impacts from the various alternatives, and Forest Plan Standards and Guidelines must be applied, as appropriate, under implementation of any of the alternatives which may impact this resource. See also the Final EIS, Chapter 3, section Watersheds and Fisheries.

Comment Type 6: Impacts on Recreation, Tourism and Visuals

Many people expressed support for roaded recreation opportunities on Gravina Island, including both motorized access and non-motorized trails, for recreation such sightseeing, hiking, and wildlife viewing. Other people felt that roads, whether open or closed, would detract from the quality of recreation opportunities, particularly due to visual impacts. Impacts to these resources are discussed in the Final EIS Chapter 3, under the sections Recreation; Transportation; and Scenery. See also Appendix E, Visuals, for photographic simulations of harvest areas. The following comments are examples of these opinions:

Timber harvest on Gravina Island can create roaded recreation opportunities for the citizens of Ketchikan. Keep as many roads open as possible for recreational use.

Alternative 4 leaves the mainline road open for public access after timber sale activities are complete (Final EIS, Chapter 3, Transportation, Recreation, and Wildlife sections). Other sale area roads would be closed to motorized traffic after sale activities are complete, but would be available as trails, increasing opportunities for a variety of recreation activities such as hiking, bicycling, camping, and berry picking.

Roaded recreation should be enhanced by recognizing sites of outstanding value for trails, camping, fishing, etc.

The Recreation section in Ch. 3 of the Final EIS describes the classification system, "Recreation Opportunity Spectrum" the Forest Service uses to identify recreation settings on NFS lands (see Figure 3-5). In addition, Figure 3-6 in the Recreation section displays both existing and potential recreation areas. Although the Forest Service is not currently undertaking planning for development of recreation sites on Gravina Island, this section describes the changes that could occur to areas affording recreation opportunities from the different alternatives. The alternatives that build roads would increase access to areas where these recreation activities might occur.

Open roads would affect wolf populations and the potential for wildlife viewing.

The Forest Plan has designated much of Gravina Island for timber production, which may affect tourism and aesthetic recreational uses for a portion of the public. In the Record of Decision, the responsible official will attempt to balance the need to protect wolf populations and recreational aesthetic values, with the need to provide timber to sustain the local economy.

An open road increases the public's opportunity for recreation access, including potential wildlife viewing. Other alternatives (2, 3, and 6) close the roads to motorized vehicles after sale activities are complete, but allow non-motorized recreation access. Alternatives 1 and 5 build no roads. The Wildlife section of Chapter 3 discusses the potential effects of an open road system (Alternative 4) on the wolf population as well as other species.

Clearcut logging detracts from the appearance of wilderness as seen by cruiseline visitors.....The alternatives did not include one specifying helicopter logging only, with no roads and no clearcuts.

Visual effects were considered in all alternatives analyzed. Many units most visible from viewpoints in Ketchikan and waterways surrounding Gravina Island were prescribed for partial-cut treatments, in order to retain a more natural post-harvest appearance.

Alternative 5 explores the effects of helicopter logging with no road construction. This alternative does include some clearcut harvest in order to be economical. Typically, clearcuts performed by helicopter are less visible than those using cable methods to remove the logs. This is due to the fact that many submerchantable stems that would be removed using a cable system to allow access to the merchantable trees can be left standing when using a helicopter. Additionally, these clearcuts are on the interior aspects of the island and are not readily visible from the water or the surrounding communities. See Appendix E, "Visuals", in the Final EIS for photo simulations of harvested areas as seen from a variety of viewpoints around Gravina Island.

Harvest impacts recreation business.

Currently there are three Commercial Outfitters permitted to operate within the project area for a total of 30 service days per year. The Outfitter/Guides are authorized to use portions of Bostwick Creek for freshwater fishing only. Other commercial trips may incidentally use the area on a pass-through basis. Commercial floatplanes and charter boats are used to shuttle customers to Phocena Bay cabin, while commercial and charter boats use the waters in and around Gravina Island for fishing and shellfish gathering. The proposed activities could have a short-term effect on users of the cabin; however, no long-term effects would result (Final EIS, Ch. 3, Recreation section).

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I am been concerned that viewsheds be protected.

Most of the timber harvest in the viewsheds within the Gravina project area have been designed to attain a higher visual quality objective than is called for in the Tongass Forest Plan. For example, the one unit (Unit 5) seen from the Tongass Narrows and from much of the city has been prescribed as a partial cut and will attain a visual quality objective of at least two levels higher than the adopted visual objective of maximum modification established in the Forest Plan. Proposed harvest in some alternatives along the eastern shore of Bostwick Inlet will meet a visual objective at least one level higher than the modification objective adopted by the Forest Plan.

After double-checking the views from the various residential areas south of town, it has been determined that the only unit that will create visual impacts (south of town) is Unit 63 above Stomach Bay. The IDT has reviewed this unit closely and looked at several ways to further mitigate the visual impacts of this unit. One of two methods will be looked at to break up the long linear form of this unit, either by lowering the back line in the center of the unit or by retaining a significant percentage of trees in the upper portion of the middle section of the unit.

Other units located in sensitive viewsheds have harvest prescriptions that call for approximately 50 percent retention of the trees or the basal area. This level of retention will significantly reduce the visual impact of these units. Photo simulations depicting possible visual impacts after logging in various scenic viewsheds are presented in Appendix E of the Final EIS.

Harvest in Scenic Viewshed should be limited to 10% of basal area.

Harvesting only 10 percent of an area prescribed for a helicopter-yarded partial cut would be economically infeasible.

Protect the scenic quality of Bostwick Inlet.

All units in the foreground of the Bostwick Inlet viewshed, all units in the viewshed extending from the mouth of Bostwick to Dall Head, and the units on the slopes facing Phocena Bay and Clarence Strait are planned and designed to meet the Standards and Guidelines for a Scenic Viewshed allocation. In addition, the land between Bostwick Inlet and Clarence Strait at the south end of the island is allocated to either Scenic Viewshed or Old Growth land use designation.

After 10,000 logging-free years, it seems ironic to start now especially with tourism.....please don't log the sales with straight boundaries.

Logging and development have already occurred on Gravina Island. A large harvest area of approximately 728 acres on the east side of Vallenar Creek is 42 years old. This area is roaded with about 2.5 miles of road. This viewshed is considered to be in a moderately unaltered condition due to the extensive amount of forested texture that has returned to this slope.

Another large tract of 573 acres that was harvested about 4 years ago on private land on the lower slopes above Seal Cove can be seen from the mouth of Bostwick Inlet and along southern Nichols Passage. In spite of the scale of the harvest, this activity has created a moderately altered scenic condition primarily because in its present state of regeneration, the area tends to blend with the natural rock outcroppings above it and the low-volume vegetation to the east. Approximately 30 years ago timber harvest activities occurred around Phocena Bay. This area is about 350 acres in size. The airport reserve, which is about 2,170 acres in size, is mostly developed and occupies 5 miles of shoreline.

No matter which alternative is selected, silvicultural prescriptions have been written designed to blend unit boundaries into existing topography and/or apply partial cutting to further reduce visual impacts.

Comment Type 7: Sustainability, Economics and Market Demand

Whether or not timber sales are economical, and how the economics of the alternatives are calculated, particularly for helicopter yarding, was a topic of many of the comment letters. Some letters suggested variations of proposed logging methods or asked for clarification on proposed methods. Some letters expressed concern over sustainability of timber harvest and over post-harvest species composition. Many people urged the Forest Service to provide economic timber for industry; others questioned the concept of market demand for timber; still others stated that the economics discussion should have included a quantified economic analysis of non-timber resources and the impact to them from implementing a timber sale. The disposition of the timber, whether it would be locally processed or exported, and how employment figures were estimated were also concerns. These topics are discussed primarily in the sections titled Silviculture and Timber Management; and Social and Economic Environment, in Chapter 3 of the Final EIS. Several of those concerns are represented here:

Timber sales should be designed so they are economic to operate in all market conditions because marginally economic sales do not facilitate stable operations and employment.

When an infrastructure of roads is not in place, as is the case with the Gravina Island Timber Sale, marginally economic offerings will result if market conditions are not favorable. When an infrastructure is in place, the result is better economics across market conditions. However, even roaded sales may become deficit under very poor market conditions.

The analysis of timber sale financial efficiency is intended to isolate and evaluate those costing centers that may influence a timber sale's economic risk, the economic cost/tradeoffs associated with specific harvest units, a project's stability through time in differing economic conditions, and other logical harvest groupings.

The Social and Economic Environment section in Chapter 3 of the Final EIS describes the economics of the timber sale alternatives. While it is not possible to predict the economic environment for the future date at which a timber sale could occur, if the sale appraised deficit at the time of offer, management options could be applied to improve the economics. These are described in the Social and Economic Environment section, under "Opportunities to Improve Economics."

Avoid helicopter yarding; it is not economical.

Provide road access for all helicopter units; many can be harvested conventionally.

By far the largest component of helicopter logging cost is the operational cost of the helicopter itself, in particular, flight distance. For these reasons, 75 percent of the total helicopter logging cost has been assumed to be directly linked to flight distance. During the planning phase of the Gravina Island Timber Sale project, much care was taken in the development of Alternatives 2 through 4 and 6 to limit helicopter yarding to areas of environmental concern and/or areas where roading was either more expensive than helicopter yarding or physically improbable. Units which are helicopter logged under Alternative 4 cannot reasonably be accessed by a road system.

Alternative 5 utilizes helicopter yarding exclusively, to emphasize the retention of the roadless character of the island by not building roads. Since flight distance becomes a limiting factor in helicopter logging, much of the timber outside conventional flight distances would not be harvested. Approximately 1/3 of the volume proposed for harvest in Alternative 5 would be helicopter yarded to a barge in Bostwick Inlet; the remaining volume would be yarded to barges outside of Bostwick Inlet.

Why were some helicopter units that were economical in other alternatives dropped in Alternative 5?

Due to the high cost of helicopter yarding, units with longer yarding distances were not included in Alternative 5. Some units with volume which in other alternatives could be flown to nearby road segments were not included because Alternative 5 does not propose any roads. Units 7 and 14 are not included in Alternative 5 due to yarding distance to Grant Cove (over 1 mile). These units were, however, included in Alternative 4, as that alternative's emphasis is to provide maximum timber volume.

The DEIS does not provide the study or data for the helicopter yarding costs.

The costs of helicopter yarding are most directly attributed to horizontal flight distance, elevation change, and volume yarded. These variables account for the majority of the estimate for helicopter-yarding costs used in the analysis. In the Final EIS, we have refined the methodology used in the Draft EIS, using more recent cost data collected from industry in Region 10 (helicopter yarding operators). This cost information has been incorporated into our logging system appraisal by alternative, considering the varying factors for each alternative (volume to be helicopter yarded in units, and horizontal flight distance and elevation change). This information was then used to determine a cost estimate for the financial efficiency

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analysis. See Table 3-5, Harvest Acres and Volume (in MMBF) by Yarding Type, and Table 3-13, Financial Efficiency Analysis for the Action Alternatives. See also Chapter 3, Silviculture and Timber Management section, paragraph "Helicopter Yarding".

Offer the helicopter logging areas to small operators and give them extended time to do unusual harvest techniques.

The helicopter harvest ranges from about 803 acres to 1,232 acres depending on the alternative. This suggested proposal works best for small operators once an infrastructure of roads is in place and the cost of timber harvest does not include roadbuilding or expensive harvest techniques such as helicopter yarding. Small operators generally do not have the resources necessary to build the amount of road proposed for the Gravina Island Timber Sale. Small operators, such as those on Prince of Wales Island, are most cost effective when working off an existing road system with little or no up-front development costs. The cost to, for instance, helicopter in a mill and then helicopter out the product would be excessive, and much of the helicopter ground is on steep slopes not adaptable to the construction of a mill site. In addition, the logs would have to be helicopter yarded to the mill site for processing. We are, however, considering the feasibility of offering the southern units as several smaller sales.

Maximize the offerings of economically feasible timber from the Gravina Island project area.

Maximum utilization of all resources is not always attainable. As stated in a Response above (Comment Type-5) "An alternative that harvested additional timber from the suitable timber base was considered and eliminated during the development of alternatives for the Draft EIS." Approximately 6,802 acres of suitable forest that met Forest Plan Standards and Guidelines could have been included in the potential unit pool. Approximately 4,584 acres were not included in any of the alternatives because the units would have been too small to harvest economically, the risk to resources was too high for the volume harvested, or the unit was too far from other areas to harvest economically."

The range of alternatives displayed in the Gravina Timber Sale Final EIS emphasize various management objectives that are consistent with the Forest Plan while being sensitive to public comment. Alternative 4, the Proposed Action, represents the greatest amount of timber harvest analyzed in this EIS.

The Forest Service should contribute to a timber supply to meet market demand.

Insure there is an adequate supply of wood fiber for the timber industry or the remaining timber jobs will not survive.

We encourage a steady and continued harvest of commercial timber from the national forest in a responsible and economically feasible manner.

The DEIS fails to adequately show that the Gravina Island Timber Sale is necessary to meet market demand for Tongass timber.

Appendix A of the Final EIS displays how the Gravina Timber Sale project and other timber projects relate to the Forest-wide timber program for the next 10 years, and discusses market demand for the Tongass. The suitable and available land base on the Tongass is capable of supporting an Allowable Sale Quantity of 267 MMBF annually.

Section 101 of the TTRA requires the Forest Service to seek to provide a timber supply from the Tongass National Forest that (1) meets the annual market demand for timber, and (2) meets the annual market demand for each planning cycle. Therefore, timber from the Tongass National Forest is being offered as part of the multiple-use mission of the Forest Service as identified in public laws. Alaska-specific legislation and the Forest Plan direct the Forest Service to seek to provide timber to meet market demand subject to appropriations and balancing of forest uses (Final EIS, Appendix A). Clearing the Gravina Timber Sale project through the NEPA process is an important step in the process the Alaska Region uses to comply with the TTRA mandate.

Alternatives 2-6 consider various levels of harvest on Gravina Island, ranging from 14 MMBF in Alternative 5 to 47.2 MMBF in Alternative 4. The Gravina Timber Sale project, and other on-going timber sale projects, is a necessary component of meeting the Tongass timber market demand (see Appendix A, "How Does This Project Fit into the Tongass Timber Program?").

The Forest Service failed to perform an accurate and fair socio-economic analysis.

The balance of resource use necessary to maintain a viable economics and social environment is not established at any one level; it continues down through the Regional and Forest levels to the project planning level. The Gravina Island project-level analysis implements the direction provided at higher levels of planning. The Forest Plan addresses this issue when it allocated the Forest to a variety of land use designations (LUDs), established general goals and objectives for the management of the Forest, and identified the desired future condition of the lands within the various LUDs. The Forest Plan

also includes a comprehensive analysis of the economic and social environment in Southeast Alaska, the Tongass National Forest, and the communities within these areas. This analysis includes detailed information on industries directly dependent upon the Forest, including the timber industry and the recreation and tourism industry. The Gravina Island Timber Sale project was designed to implement the Forest Plan and the Final EIS prepared for this project tiers to the analysis in the Forest Plan EIS. Socio-economic impacts are discussed in Chapter 3 of the Final EIS.

The Gravina Island timber sale is projected to generate from 88 to 295 jobs during the life of the project depending on the action alternative. These jobs translate to total incomes ranging from 3.9 to 13.1 million in direct income. These jobs and income figures are based on assumed export of the Alaska yellow cedar (see Table 3-12 in Chapter 3). The communities adjacent to Gravina Island directly affected by this project are: Metlakatla on Annette Island, and Ketchikan and Saxman on Revillagigedo Island. The open road system proposed on Gravina Island in Alternative 4 could encourage industrial and residential development possibilities on Gravina Island, which could have a direct positive effect on the economics of Ketchikan and Saxman. See also the section titled Social and Economic Environment, and the section titled Environmental Justice, both in Chapter 3 of the Final EIS.

The estimates for jobs generated from logging activities on non-Forest Service lands is flawed because cedar, spruce, and hemlock will likely be exported in the round.

The discussion of Cumulative Effects in the section Social and Economic Environment in Chapter 3 of the Final EIS discusses the timber harvest that could occur on non-National Forest System land on Gravina Island. Some level of harvest will likely occur on State land, regardless of activities on NFS lands. Table 3-15 in this section displays the employment job years and total direct income for logging and sawmills that could be generated by the sale of timber from State of Alaska Department of Natural Resources land. The table's figures are based on the assumption that all Alaska yellow cedar and 50 percent of the western red cedar volume are exported without any local processing.

What will happen to the cedar from the Gravina Timber Sale and from sales on other ownerships?

Applications for cedar export permits on Forest Service timber sales are dealt with on a case-by-case basis and approved at the Regional Forester level. Permits are based on the availability of local markets. Mills around Southeast have cut cedar and the Forest Service will adjust stumpage rates for domestic processing. Generally, on the Ketchikan Misty Fiords Ranger District Alaska yellow-cedar has been approved for export, while western redcedar has been manufactured locally.

At the present time, timber sold by the Alaska Division of Forestry is required to be manufactured in the State of Alaska on lands managed by the Alaska Department of Natural Resources. Export permits are dealt with on a case-by-case basis and approved at the local area office level. Permits are based on the availability of local markets and economic feasibility. On University and Alaska Mental Health Trust lands, export of logs in the round may be permitted; however, again, it cannot be arbitrarily assumed that timber will automatically be exported.

Basing the Public Investment Summary on only a few of the sale's direct costs misleads the public.

The Final EIS, Chapter 3, Social and Economic Environment, explains in more detail the rationale for Public Investment Analysis. Public Investment Analysis is not presented as including the cost of every aspect of a timber sale. As stated in the Final EIS, the "Forest Service cost per hundred cubic feet (CCF) is based on the Region 10 average budget allocation of \$20.50/CCF for analysis, \$11.50/CCF for sale preparation, \$4.50/CCF for sale administration and \$14.00/CCF for engineering support. The Public Investment Analysis cost is constant and is applied to all alternatives, including the No-action Alternative."

The dollar value of un-logged forest or standing, dead and down timber, should have been calculated and used in the analysis of economic costs.

A dollar value has not been established for the benefits of undisturbed standing forests in Southeast Alaska. The IDT described and analyzed ecosystem functions of the project area such as biodiversity, soil stability, fish habitat, water quality, subsistence resources, recreation, and scenery throughout the Draft EIS and in this Final EIS. Particular attention was paid to the values of the inventoried roadless area (see Chapter 3). Economic values were not assigned to the "ecosystem services".

The Forest Service is not required to quantify the non-market benefits and costs associated with every timber sale. However, the Forest Service is required to insure that unqualified environmental amenities and values are given appropriate consideration in decision-making, along with economic and technical considerations. The Gravina Island Timber Sale Final EIS analyzes the potential effects of the project on unqualified environmental amenities and values such as wilderness, old growth, recreation and scenery, wildlife, and subsistence.

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Once this area is destroyed, it will not come back in our lifetime.

All the areas proposed for harvest have been analyzed by wildlife, fisheries, soil, archaeological and scenic specialists to ensure that timber harvest can take place in harmony with protection of our natural resources. All of the areas proposed for timber harvest are expected to meet the requirements of the National Forest Management Act (NFMA) regulations. Regeneration surveys will be conducted on all harvest units after the third full growing season following the completion of logging. All harvested areas are expected to be naturally stocked and certified after three full growing seasons. Monitoring of previous harvesting on the Ketchikan-Misty Fjords Ranger District shows a 100 percent regeneration success rate. As required by NFMA, within 5 years of harvest all areas have been certified as restocked.

It has been typical for logging industries to make irreversible mistakes while no one is looking, and then apologize for them later.

Harvest activities are administered by certified Forest Service personnel to see that all contractual obligations and environmental standards and guidelines are followed. Post-harvest monitoring also occurs. This monitoring is an interagency monitoring activity with participation by the State of Alaska fish and wildlife personnel, the United States Fish and Wildlife Service, soil scientists, hydrologists and environmental engineers. A full monitoring report on timber harvest activities is available from the Forest Service on an annual basis.

Meaningful information is lacking on species composition.

The Silviculture and Timber Management section of Chapter 3 in the Final EIS describes the species composition in the project area as follows: western and mountain hemlock, 57 percent; Alaska yellow cedar, 7 percent; western red cedar, 19 percent; and Sitka spruce, 16 percent. (These percentages are computed from stand exam data and based on the percent volume (CCF) in the proposed harvest units.) Shore pine, Pacific silver fir, and red alder comprise 1 percent of the total volume. Table 3-4 in the same section displays the proposed harvest volume by species for each alternative. This section also describes the post-harvest species composition under the paragraphs titled "Post-harvest Species Composition".

Why not harvest additional timber from the suitable land base?

An alternative that harvested additional timber from the suitable land base was considered and eliminated during the development of alternatives for the Draft EIS. As stated in the Draft EIS, approximately 6,802 acres of suitable forest that met Forest Plan Standards and Guidelines could have been included in the potential unit pool. Approximately 4,584 acres were not included in any of the alternatives because the units would have been too small to harvest economically, the risk to resources was too high for the volume harvested, or the unit was too far from other areas to harvest economically (Chapter 2, Final EIS, "Alternatives Considered but Eliminated from Detailed Study").

Postpone a decision until the future of Gateway Forest Products is less murky.

Despite a more than adequate timber supply, Gateway Forest Products company has ceased its sawmill operations due to slumping markets.

Although the Gateway Forest Products sawmill and veneer mill in Ketchikan have closed, there are other sawmills in Southeast Alaska dependent on wood from Forest Service timber sales that would be interested in bidding on timber sales offered from the Gravina project. In addition, the Ketchikan Gateway Borough (Borough) purchased the veneer mill following the bankruptcy of Gateway Forest Products. The Borough intends to work with the Alaska Industrial Development and Export Authority (AIDEA) to operate the mill or to find a potential buyer (see the Social and Economic Section in Chapter 3 of the Final EIS).

For additional information regarding the supply of timber to industry and how the Gravina Timber Sale relates to this supply, please refer to Appendix A of the Final EIS.

The road across Gravina Island should be built, but not as part of the Gravina sales. Applying the road to the sales is uneconomic. All the sale volume should be hauled to Bostwick Inlet and Seal Cove.

While the economics of a proposed timber sale is one of the issues that the IDT thoroughly analyzes, it is not the only one. Some of the issues with any roadbuilding on Gravina Island included cost, maintenance, right-of-ways and easements, need for increased access other than the proposed timber sale and outcomes of increased access on wildlife, recreation, cultural sites, future economic opportunities, subsistence, and remoteness or roadless characteristics. All of these resources are analyzed in Chapter 3 of the Final EIS. Alternative 2 was analyzed with a new log transfer facility in Bostwick Inlet because this was the most economical method to remove the logs. However, this LTF and any barge activity in Bostwick Inlet is a concern for many people in Ketchikan, Saxman and Metlakatla that use Bostwick.

Eliminating the cross-island road provides all potential bidders with an equal opportunity to bid on the timber instead of favoring one potential bidder whose mill would have direct access.

The Forest Service bidding process for timber sales of this size does not favor one bidder over another. Sales are sold by closed bid to the highest bidder. Smaller sales are "set aside" to give preference to small businesses, but these are also sold by closed bid to the highest bidder. While Alternatives 3, 4 and 6 propose a road system to access the Tongass Narrows side of the island and use of the LTF at Pacific Log and Lumber, these alternatives were not developed to give the owner an advantage in the bidding process. Alternative 2 eliminates the cross-island road, emphasizing timber economies and has the most net stumpage value of any of the other alternatives. There were many other factors in considering a road from the Tongass Narrows. Securing other money to build the road across private land would increase the economies of any timber sale. There is no guarantee that "other" money will be made available.

The DEIS fails to provide any explanation for the direct-to-indirect (jobs) ratio used in the DEIS.

The jobs/harvest volume ratio in the Draft EIS is from the Forest Plan Final EIS page 3-480, as noted in Table 3-9 of the Gravina Draft EIS. As described on page 3-19 of the Draft EIS, direct and indirect employment figures include jobs in logging, construction, marine transport, and sawmills. The Final EIS displays employment estimates for direct jobs only, and provided additional discussion of how these numbers are calculated. See Final EIS, Chapter 3, Social and Economic Environment section, "Project Employment and Income", and Table 3-12, Logging-related Employment and Income for Each Alternative. Employment and appraisal figures include cedar export assumptions, as noted in the discussion under "Project Employment and Income."

The DEIS fails to consider that a high percentage of the workers in the lumber and wood products industry are nonresidents. Both the number of direct jobs and income from those jobs is therefore inflated.

The Forest Plan SEIS, on which the Project Employment and Income discussion in the Gravina Final EIS is based, estimated that 5.28 direct jobs (logging, construction, marine transport, and sawmills) are generated per million board feet. The Forest Plan SEIS acknowledges, on page 3-247, that, "...nonresidents....overall contribution to the regional economy is less because they spend less of their earnings in the region." However, whether or not all workers are year-round residents does not change or inflate the number of jobs created or the income the workers receive. While some loggers are nonresidents of Alaska, many sawmill workers are year-round residents. The owners of the remaining Southeast Alaska sawmills are all local families.

In addition, the footnote to Table 3-12, Logging-related Employment and Income for Each Alternative states, "Number of jobs are not absolute but are used for comparison purposes" and, "Woods products gross income (are) estimates from the Forest Plan SEIS (2003), adjusted to 2000 dollars."

The DEIS erroneously states that "local communities would not benefit from the Federal 25 percent Fund Act receipts under the No-action Alternative.

Under the Federal 25 percent Fund Act, there are no returns to a community from a project alternative that generates no timber revenue, such as the No-action Alternative. Table 3-11 of the Draft EIS displays the potential estimated return to the State of Alaska and Ketchikan Gateway Borough based on 25 percent of total revenue. Since the No-action Alternative generates no total revenue, there is no 25 percent return. As explained in the Draft EIS, H.R. 2389 (Secure Rural Schools and Community Self Determination Act of 2000) had been recently enacted and could change the returns, but the effect to individual communities was unknown at the time.

In the Final EIS, Chapter 3, Social and Economic Environment section, the paragraph titled "Payments to the State of Alaska" discusses the more recent Secure Rural Schools and Community Self-Determination Act of 2000, and states that under the new Act, "difference in revenues across the planning alternatives will have no effect on the payments these boroughs receive". Therefore, local communities would receive the same financial benefits from the Secure Rural Schools and Community Self-Determination Act of 2000 under all alternatives, including the No-action Alternative.

In Table 2-5, \$800.00 per year per road mile seems like a very low maintenance expense over time. Are transportation costs in Table 3-14 included here?

Why aren't road maintenance costs included in Table 3-7? Are fuel costs included?

Are road construction and maintenance costs included in direct project costs on Table 3-12?

The Draft EIS Table 3-14 shows construction costs (Table 3-14, "Transportation Construction Costs by Action Alternative"). In Table 2-5 of the Draft EIS, the row titled "Cost to maintain roads after timber sale" the \$800.00 per year for Alternative 4 constitutes the average cost per mile (including both open and closed road) to maintain the road after the timber sale. These costs are described in greater detail in the Final EIS, Chapter 3, Transportation section; see Table 3-19, Long-term Operation

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and Maintenance Costs for Proposed Roads, by Alternative, which includes road closure costs (physical and administrative) and maintenance costs for open and closed roads status.

The Draft EIS Table 3-7 is named Timber Values and Costs to an Operator of Average Efficiency. As noted in the paragraph preceding the table, the transportation costs include logging costs such as felling, bucking, yarding, loading, and administration, and haul, dump, tow and raft costs. Construction costs include capital investments such as road construction, bridges, bulkheads and culverts. These are all costs to the sale purchaser operating the sale. Road maintenance related costs including closure, maintenance and administration are incurred by the Forest Service after the sale is completed and are displayed in Table 3-19. Fuel consumption estimates are included in Table 3-10 in Chapter 3 of the Final EIS.

The Draft EIS Table 3-12's "Direct Project Costs" are footnoted in the table as including NEPA, Sale Prep, and Sale Administration costs.

Explain broadly how you made your choices for cable or helicopter yarding.

Yarding systems, and some of the factors considered in assigning them, are discussed under "Logging Systems" in the section titled Silviculture and Timber Management in Chapter 3 of the Final EIS. As stated in that section, "Cable systems have the capability to partially or fully suspend logs over the ground, reducing soil disturbance. These systems are best suited to even-aged silvicultural prescriptions." Helicopter yarding is often used when trees are retained to meet other resource concerns, and causes the least amount of ground disturbance of all the systems, but usually has the highest yarding cost. Helicopter yarding can also be used when road access is more expensive than helicopter yarding.

The Forest Service must use a qualified interdisciplinary team to prepare environmental impact statements.

Chapter 4 of the Final EIS lists the backgrounds and qualifications of the members of the Gravina Island interdisciplinary team. In addition, the analysis for the Forest Plan, to which this project is tiered, was conducted by an interdisciplinary team that included economists, social scientists, recreation planners, wildlife and fish biologists, as well as other disciplines. The Economic and Social Environment section of the Forest Plan Final EIS includes very detailed information on industries directly dependent upon the Forest, including the timber harvesting and processing, recreation and tourism, seafood harvesting and processing, and mining industries.

Comment Type 8: Don't Harvest on Gravina Island

Some of the comment letters the Forest Service received stated that if timber harvest were to occur, it should occur somewhere other than Gravina Island. Following are some examples of these comments:

We are looking at cutting our own backyard - leave Gravina alone.

Timber from Gravina Island is being proposed as part of the multiple-use mission of the Forest Service as identified in public laws. Alaska-specific legislation and the Forest Plan direct the Forest Service to seek to provide timber to meet market demand subject to appropriations and balancing of forest uses. The relocation of this project in another area is inefficient and potentially contrary to the standards and guidelines of the Forest Plan. This decision is based on the cumulative impact on other resources from past harvest activities, the location of timber sales under contract, and the eventual use of all suitable lands for timber sale projects (Appendix A, Final EIS).

Our Forest Plan, through an intense public involvement process, allocated land use designations for National Forest System land on Gravina Island, as well as for the rest of the Tongass National Forest that allow for development activities (including timber harvest). In order to maintain an even flow of activities across these developmental lands, the Forest Service must schedule our activities so as not to manage one area more heavily or more often than another. Management of Gravina Island is part of that schedule. There are other land designations in place which preclude timber harvest; for instance, Old-growth Reserves and riparian beach buffers. Currently 33 percent of National Forest System land on Gravina Island is in non-developmental designations.

See also the section titled "Why Can't This Project Occur Somewhere Else?" in Appendix A, Reasons for Scheduling the Environmental Analysis, in the Final EIS.

There is still considerable timber to be logged in sites that already have roads.

Many of the roaded areas on the Ketchikan-Misty Fiords Ranger District that are designated for development activities (including timber harvest) have been harvested in the last decade or have been removed from development status. Other roaded areas are currently on the Ten Year Schedule and are being analyzed for additional harvest opportunities.

Appendix A of the Final EIS states: ".....all suitable timberlands will eventually be scheduled for harvest to meet the current and projected demand for raw material in Southeast Alaska. The relocation of this project to another area is inefficient and potentially contrary to the standards and guidelines of the Forest Plan. This decision is based on the cumulative impact on other resources from past harvest activities, the location of timber sales under contract, and the eventual use of all suitable lands for timber sale projects." Therefore, areas of suitable timberlands, including Gravina Island, are being analyzed for timber harvest.

As a lifelong resident, I have very fond memories of Vallenar Bay. I do not think this pristine environment should be logged. There are other spots that would be far better.

Vallenar Bay was heavily logged in the 1960s. It is no longer National Forest System land and is therefore not part of the Gravina Island Timber Sale.

Comment Type 9: Silvicultural Prescriptions

Silvicultural prescriptions, particularly concerns with clearcutting, were a topic in several letters. While some letters favored the use of clearcutting as a means to increase economic return and temporarily enhance wildlife habitat, many viewed clearcutting as unfavorable to wildlife habitat, viewsheds, and water quality. The Silviculture and Timber Management section of Chapter 3 in the Final EIS explains the rationale for prescribing clearcutting, as well as two-aged and uneven-aged systems. Examples of some of these concerns are included below:

Clearcut logging should be avoided on Gravina Island.

The determination of whether clearcutting is the optimum method at the project level is based on site-specific factors (including aesthetics, environmental, biological, and engineering constraints), and will often be influenced by other concerns, such as the difficulty in protecting residual stands through harvest operations on steep slopes, viable sale economics, the desirability of perpetuating individual trees or species, and other forest health concerns (Forest Plan, page G-32). Current direction from the Record of Decision for the Forest Plan is to use clearcutting where such practices are determined to be the best system to meet the objectives and requirements of the Land Use Designation. The Forest Plan Record of Decision identifies that using even-aged management will occur on approximately 80 percent of lands allocated to timber. The Gravina Island action alternatives prescribe clearcutting on between 27 percent and 63 percent of the proposed unit acres.

Clearcuts serve only to provide a short-term economic boon to the industry while ravaging opportunities that might exist for present and future generations.

The desired future condition for Timber Production Land Use Designation (LUD) includes a sustained yield of timber, healthy tree stands in a balanced mix of age classes from young stands to trees of harvestable age, and a road system providing access for timber management as well as recreation, hunting and fishing, and other public uses. The appropriate Forest Plan management direction for this LUD is to "[m]anage the area for industrial wood production...promote conditions favorable for the timber resource and for maximum long-term timber production". The selection of the silvicultural system for each unit was based on a thorough review of site-specific environmental and economic factors, and a consideration of Forest Plan management direction. Clearcutting was prescribed as a means to: minimize the risk of windthrow, reduce the spread of dwarf mistletoe, promote natural regeneration, improve site productivity through increased soil temperature, minimize road building and maximize economic returns. The prescriptions that reference clearcutting will not all look like past clearcuts on the forest due to the implementation of reserve trees in many of the prescriptions. Also, no openings will exceed 100 acres. Silvicultural systems proposed in this EIS include two-aged and uneven-aged systems, as well as even-aged (clearcutting) (see Table 3-3, Gravina Island Project Harvest Units, Acres, and Silvicultural Systems by Alternative, in Chapter 3 of the Final EIS). Even-aged acres range from 219 acres (out of 803 acres) in Alternative 5 to 1,244 acres (out of 2,218 acres) in Alternative 4.

The Forest Service is directed to evaluate a wide range of alternatives and to assess the financial efficiency of proposed timber sales. Selection harvest techniques are more costly than conventional cable harvest. To maintain economic viability of the project, selective harvest has been tempered with the need to provide an economic sale.

Many of the uneven-aged and two aged harvest prescriptions appear to be essentially smaller clearcuts within the larger unit boundaries.

In Alternatives 2, 3, 4, and 6, between 37 and 44 percent of the acres prescribe uneven-aged and two-aged silvicultural systems, to meet various management objectives. In Alternative 5, 72 percent of the harvest acres prescribe uneven-aged and two-aged silvicultural systems. The even-aged management (clearcutting) system includes even-aged clearcut with reserves (EACCR), and Seed Tree Cutting (STS), in addition to Clearcut. Silvicultural prescriptions are identified for each unit in the Unit Cards, Appendix B of the Draft EIS.

Where two-aged management or uneven-aged management is prescribed, substantial amounts of structure, ranging from 30 percent of the basal area to 70 percent, will be left in the harvest unit. Each silviculture prescription type has been defined at the Forest level and must meet certain criteria. For example, a group selection prescription cannot have openings greater than 2 acres or wider than two times the height of mature trees. See "Silviculture Systems" in the Silviculture and Timber Management section of Chapter 3 for a more detailed definition of individual silvicultural prescriptions.

Good timber management can increase growth and yield so fewer acres are needed for timber harvest in the future.

Good timber management can transform certain decadent timber stands to a managed condition with healthier, faster-growing trees.

It is anticipated that the harvest prescription will result in higher yields in the future by increasing the growing space for trees left in areas of selective logging and by the removal of over-mature, defective trees which will be replaced by younger, healthier ones. The Silviculture and Timber Management section in Chapter 3 of the Final EIS addresses these topics in the paragraphs titled Forest Health, Rotation Age and Future Entries, Regeneration, Post-harvest Silvicultural Treatments, and Long-term Timber Productivity (Yield).

Clearcutting an area improves habitat for small birds, small animals, raptors, and deer.

Cavity nesters, especially those favoring high-volume old-growth areas, will be the losers with clearcutting.

All seral stages of stand development have differing yet important values for wildlife species. Clearcutting creates an early seral stage, which creates habitat for some species of birds and small mammals. It also provides browse.

Old-growth forests do provide important habitat for old-growth associated wildlife, including cavity or snag-dependent species such as flying squirrels, woodpeckers, and owls. Large dead or defective trees provide nesting sites for marten, owls, eagles, wrens, and chickadees, among other species. They also create feeding sites for woodpeckers, sapsuckers, brown creepers, and other species (Final EIS, Chapter 3, Biodiversity and Old Growth section). Habitat for these species is protected under Forest Plan Old-growth Reserves, old growth in other non-harvest LUDs and buffers, Cavity Nester Standards and Guidelines (Forest Plan, pages 4-117 & 4-118), and reserve trees/snag retention requirements within high-value marten habitat (Forest Plan, pages 4-119). Live trees left to meet Marten Standards and Guidelines contribute to future recruitment of snags (Final EIS, Chapter 3, Wildlife section).

All units, including those applying even-aged prescriptions, meet Forest Plan Standards and Guidelines for cavity nesters and marten (see Unit Cards, Appendix B of the Draft EIS and Appendix F of the Final EIS), which include measures such as leaving clumps of trees or individual trees in the unit (reserve trees) or standing snags, where appropriate. "Clearcutting with Reserves" (EACCR) is an even-aged method that leaves trees, scattered or clumped, throughout the unit to leave structure to meet various resource objectives (Final EIS, Chapter 3, Silviculture and Timber Management section).

The Final EIS, Chapter 3, Silviculture and Timber Management section provides more detailed information on harvest acres by silvicultural prescription by alternative, and harvest acres by volume class by alternative. See the Final EIS, Chapter 3, Biodiversity and Old Growth section for more detailed information on harvest acres of high-volume productive old growth (POG).

The DEIS fails to adequately describe the silvicultural systems....does it mean percent of volume retained, trees retained, or basal area retained?

This has been clarified in the Final EIS, Chapter 3, Silviculture and Timber Management section, under "Silvicultural Systems". Two-aged systems utilize treatments which leave behind a substantial portion (30 to 40 percent of the basal area) of the original stand structure. Stands proposed for an uneven-aged system in this project would have approximately 50 percent of the basal area removed this entry. See also Table 3-3, "Gravina Island Project Harvest Units, Acres, and Silvicultural Systems by Alternative" in this same section.

We do not have multiple use now, we have a fight over turf. We should try harvesting at an extremely low level, using a 300-year rotation, most likely selective logging.

The Forest Service recognizes that it cannot manage for multiple use on every square foot of its land base. Knowing this, land use designations have been developed which emphasize certain management strategies such as recreation, wilderness, timber, scenic or wildlife. Standards and Guidelines have been developed which mitigate the effects of a management strategy on "other" resources and this mitigation has been often construed as "fighting over turf". The management strategy suggested here would require some type of infrastructure such as roads to accomplish. To implement this using helicopter yarding would not be economically effective. Much timber harvest on the Tongass in the early 50s was carried out in a similar manner. The process was through A-frame logging along the beach, with salt water being the infrastructure. This option is no longer available. On Gravina Island the development of a road infrastructure would require a sufficient amount of timber to cover the construction costs.

Comment Type 10: Beyond the Scope of this Analysis

Many commenters brought up issues that are beyond the scope of project level analysis, such as concerns about global warming, global waste of wood products and promoting use of recycled materials, and other comments; however, responses were included in some cases, shown here, to provide clarification.

As I told National Geographic concerning global warming, every tree counts.

Trees have many values, all of which are important, but public opinion differs on which values should be prioritized in the management of National Forest System land. On the Tongass National Forest, the Forest Plan designates areas for varying uses through Land Use Designations such as National Monument, Old-growth Reserve, riparian buffers and other non-developmental uses, as well as Timber Production.

Effects of global warming are not detectable at the scale of a local project, such as the Gravina Island Timber Sale. Such effects may be measurable at the bioregional scale; however, standardized methodology for such analysis is not yet available.

By contributing to a vast global waste of wood products the Forest Service has failed to meet substantive obligations to conserve forests and promote use of recycled materials.

Forest Service efforts to promote the conservation of forest products and the use of recycled materials are generally undertaken at the national level through the Forest Products Conservation and Recycling (FPCR) program. This program provides technical assistance to communities and businesses that foster conservation through proper utilization of forest products including efficient processing, marketing, and recycling. In Fiscal Year 1997, the FPCR program disseminated a variety of technical papers and literature relating to wood utilization and recycling technology, made a number of presentations at workshops or symposia on wood utilization and recycling, and contributed to the processing and marketing of 155,000 cubic feet of underutilized species and the recovery of 310,000 cubic feet of timber volume through better processing techniques (see Fiscal Year 1997 Report of the Forest Service).

The USFS does a disservice to the people with its large corporate-centered mandate to get out the cut.

The Forest Plan was developed through an intense public involvement process and embraces the multiple-use mission of the Forest Service. The Forest Plan Land Use Designation areas are managed for a variety of uses; for instance, Wilderness, Recreation, and Old-growth Habitat (which allow no commercial timber harvest), as well as Timber Production, Modified Landscape, and Scenic Viewshed (which allow timber harvest) (Forest Plan, Chapter 1). Gravina Island's land use designations include Old-growth Habitat, Scenic Viewshed, and Timber Production.

Timber-related industry provides employment in SE Alaska, and forms one component of SE Alaska's economy that also includes recreation, tourism, and marine industries. See the section Social and Economic Environment in Chapter 3 of the Gravina Final EIS. In addition, silvicultural management benefits forest health by helping to control and reduce diseases such as mistletoe infestation by removing infected timber and allowing healthy second growth to take place; and decommissioned logging roads can provide recreation opportunities such as hiking access for the public. See the section Silviculture and Timber Management in Chapter 3 of the Gravina Final EIS.

Comment Type 11: Old-growth Analysis and Biodiversity

Several comments were received on the topic of old-growth analysis and biodiversity. Some letters disagreed with how the analysis was conducted, or with the proposed small Old-growth Reserve changes. Other letters questioned the viability analysis. Some examples are included here; see also Biodiversity section in Chapter 3 of the Final EIS for clarification.

Your Old-growth analysis is flawed.

The Medium Reserve on Gravina Island was designated by the Forest Plan and agreed to by an interagency team of biologists. As required by the Forest Plan, an Interagency review was conducted as to the location and effectiveness of the Small Old-growth Reserves on Gravina Island.

Biodiversity and Old-growth Reserves on Gravina Island should not be a concern. There are millions of acres of wilderness and mountains in the Tongass that provide for biodiversity and old-growth habitat. Is it a policy of the Forest Service to make adjustments and/or amendments to the Forest Plan? Even with the proposed changes in small Old-growth Reserves, none of them meet the biologically preferred recommendation for POG acres.

The Forest Plan Old-growth Habitat Reserve strategy is designed to ensure adequate protection of old-growth habitat. This strategy was applied to the Gravina Island project. The Forest Plan (Appendix K) requires that the Small Old-growth Reserves be evaluated by an Interagency Team of biologists on a project specific level. This review was done for the Gravina project and is located in the planning record. The modifications proposed were selected by the Interagency Team after evaluating several alternatives. Appendix K provides suggested guidelines for use when reviewing the Old-growth Reserves at the project level but does not have absolute requirements for reserves.

Effects to biodiversity should be considered at both the local level and within the Revilla/Cleveland Peninsula biogeographic province.

Analyzing the effects of a 64,000-acre project on a 1,347,906-acre biogeographic province is best undertaken at the Forest Plan scale. The Forest Plan Old-growth Habitat Reserve strategy is designed to ensure adequate protection of Old-growth Habitat and contains analysis at the biogeographic scale. This strategy was applied to the Gravina Island project.

Your analysis fails to address species viability.

The Forest Plan, to which this analysis is tiered, has implemented a comprehensive conservation strategy to ensure long-term viability of species within the Tongass National Forest. The administrative record for the Forest Plan demonstrates that the old-growth reserve strategy provides for viable populations of all old-growth associated species. The 1997 Record of Decision discusses conservation of habitat for old-growth dependent species. It states, in part: "The Forest Plan contains an integrated old-growth habitat conservation strategy consisting of two basic components: (1) a Forest-wide reserve network, and (2) a matrix management strategy. The Tongass currently has approximately 5,060,000 acres of productive old-growth forest. ... The Forest Plan will fully protect 70 percent of that in some form of non-development LUD, reasonably distributed across the Forest; this will include about 163,000 acres of the Old-growth LUD. ... The second component of the old-growth conservation strategy is management of lands with LUD allocations where commercial timber harvest may occur. Within these areas, which make up about 22 percent of the Forest, components of the old-growth ecosystem are maintained by standards and guidelines designed to protect important areas and provide old-growth forest habitat connectivity. ... Finally, the Forest Plan contains an additional standard and guideline which provides for a connection between each large or medium habitat reserve and at least one other reserve if other standards and guidelines are not sufficient (Tongass Land Management Plan Revision ROD page 32)." In addition, some species, such as marten, goshawk, and wolf, have specific Standards and Guidelines to help address concerns related to individual species.

There was no up-to-date population data used in your analysis.

Population data is not necessary to conduct viability analyses. For most species, a detailed understanding of their population biology is not available to develop discrete estimates of viable populations or of existing population size. Because of these uncertainties and the lack of complete information, population viability analyses are most frequently based on habitat inferences and conducted as risk assessments of the likelihood of maintaining populations over time. Species habitat relationships are used to assess the historical, present, and anticipated amounts and distribution of key habitats, and to estimate the population trends and the opportunities for individuals to interact within the population throughout the planning area. Accepted principles of conservation biology and landscape ecology were integrated into the analysis conducted for the Forest Plan, and the Gravina project appropriately tiers to the Forest Plan in its discussion and analysis of population viability requirements.

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Logging on Gravina Island would destroy one of the last remaining old-growth forests. The multiple uses are not compatible on Gravina Island - the only LUD on the island should be the old-growth reserve.

The 1997 Forest Plan for the Tongass National Forest provides for a variety of multiple uses, such as outdoor recreation, timber, wildlife, fish, watershed, old growth, biodiversity and wilderness. To accomplish this goal, the Forest Plan includes a wide range of land use designations ranging from areas that essentially allow no land-disturbing activities to areas allowing intensive resource development, and a set of Standards and Guidelines that ensure management objectives for these land allocations are met. The 16.8 million-acre Tongass National Forest currently has approximately 5.0 million acres of Productive Old-growth forest. The Forest Plan fully protects 90 percent of that in wilderness and other non-development land use designations, reasonably distributed across the Forest (Forest Plan SEIS 2003, p. 3-36).

The Forest Plan allocated portions of the Gravina Island Timber Sale project area to land use designations that allow timber harvest. Currently, however, about 33 percent of the National Forest System lands on Gravina Island are designated as Old-growth Habitat (see Table 1-1, Chapter 1 of this Final EIS). These lands are reserved from timber harvest. A non-significant amendment to the Forest Plan, which is proposed under all of the action alternatives, would allocate an additional 300 acres to these reserves. Other lands set aside include beach fringe, estuary and stream buffers. The Gravina project is consistent with the Forest Plan and would provide timber without substantially altering the visual aspects or wildlife habitat capability of the project area.

Comment Type 12: Supports a Specific Alternative

Many letters stated a preference for a particular alternative. While some letters expressed support for the No-action Alternative, other letters supported a particular action alternative, suggested modifications to an action alternative, or asked how an alternative would be selected. Examples of some of these comments are included here.

I support the timber harvest planned in the Gravina Island DEIS.

My suggestion is the No Action. Timber harvest will have a negative effect on cultural and traditional subsistence uses.

I prefer the No Action alternative. I own a piece of property on Bostwick Bay and any large scale forestry activities would greatly compromise my ability to have the kind of lodge I plan to build there.

My preferred alternative is Alternative 3. This allows timber harvest yet protects the Bostwick Inlet area.

I have reviewed the draft EIS for the Gravina Island project and support Alternative 4. We support Alternative 4 with changes to improve safety and to improve timber sale economics.

We prefer Alternative 5. It does not add road miles, has the fewest acres of clearcut, and has the least detrimental effects on wildlife.

How are the alternatives ranked? Is the No-action Alternative included in this ranking?

All Forest Service decisions in which land has been designated for development (such as timber harvest) or non-development (such as Old-growth Reserves) are part of a public process. The Public Involvement and Public Input sections in Chapter 1 of the Final EIS explain the opportunities the public has had to comment on the Gravina project. It also notes how those comments were used to identify issues that drove alternatives to the proposed action. Chapter 2 notes that an additional alternative was analyzed in detail as a result of additional public comment. All the alternatives, including the No-action Alternative, receive serious consideration by the Responsible Official. The final decision for the Gravina Island Timber Sale project will be made based on the best information available, and after considering all public and agency comments received during the planning process.

Many factors are used as a basis to compare alternatives and are considered for each alternative, including the No-action Alternative. As shown in the Comparison of Alternatives Table 2-2 in Chapter 2 of the Final EIS, the alternatives affect the different resources and issues to varying degrees. Some of the factors compared include timber economics such as road costs, jobs created, harvest cost and revenue; potential changes to wildlife habitat; subsistence use, public access; number and type of stream crossings; and impacts to seen viewsheds. In addition, public comments may disclose other issues for the Forest Service to take into consideration when analyzing the alternatives.

Chapter 3 of the Final EIS analyzes in more detail the effects of all alternatives, including the No-action Alternative. There is no overall "rank" that the alternatives achieve; while all alternatives meet Forest Plan Standards and Guidelines, an alternative that is considered more favorable for wildlife habitat may not be the alternative considered the most favorable for scenic viewshed or timber economics, for example. As stated above, the Responsible Official will consider all the information presented, and all public and agency comments, when making the final decision.

A combination of Alternatives 2 and 4 with further modifications will provide the greatest net stumpage income while protecting other resources.

While modifications to Alternatives 2 and 4 could provide a greater stumpage, the implementation of those modifications in most cases would not adhere to Forest Service Standards and Guidelines nor offer the decision maker a wide enough range of alternatives from which to choose.

Comment Type 13: Stand Structure and Volume Class

Coarse-canopy forest structure, volume class and volume strata, and the effects to wildlife habitat from harvest of coarse canopy stands were concerns in some of the comment letters the Forest Service received. This topic is addressed in the Biodiversity section of Chapter 3 in the Final EIS. In addition, examples of some of the comments received are shown below:

Without information in the DEIS on the forest structure that will remain on Gravina following the cutting, it is difficult to evaluate the impacts.

The model created by Caouette to display coarse-canopy stands is undergoing intensive field accuracy assessments. The Forest Service did agree to supply this information, "as soon as it received final review" as part of our Memorandum of Understanding with the State. Characteristics of these stands include relatively low stem densities, large diameters, and coarse-textured canopies when viewed from the air. The Biodiversity section of Chapter 3 of the Final EIS describes how volume classes 6 and 7 can be used as an indicator of coarse canopy forest (Caouette et al 2000).

The High, Medium and Low strata were designed to provide better information than the previously used TIMTYPE, which was indeed nothing more than an indication of species composition and volume. The Structure Class Model is currently undergoing peer review. Although the model is indeed a useful tool for providing further refinement of the high, medium and low volume strata, it does not disregard them altogether. In fact, it utilizes them as the base from which the structure classes are derived.

We are concerned about the disproportionate harvest of rare, coarse-canopy, high-volume stands.

Approximately 11 percent of the productive old growth on National Forest System land on Gravina Island is coarse canopy forest. The proposed harvest of coarse canopy for the action alternatives ranges from about 2 percent to about 11 percent of the coarse canopy on NFS lands. Table 3-52 in the Biodiversity section in Chapter 3 of the Final EIS shows the proposed harvest of coarse canopy by alternative. Approximately 69 percent of the volume classes 6 and 7 that exists on NFS lands on Gravina is protected in some manner (beach and estuary, Old-growth Reserves, stream buffers, etc.).

The general consensus from interagency biologists is that timber volume classes 6 and 7 are an adequate predictor of coarse canopy stands.

Comment Type 14: Cumulative Effects

Effects to resources from project activities can extend beyond NFS lands, and effects to resources on NFS lands can occur from activities on adjacent non-NFS lands. In addition, past and reasonably foreseeable future activities on both NFS and non-NFS lands can increase the impacts from the project being currently analyzed. The IDT considers these cumulative effects when analyzing a proposed project. Several comment letters expressed concerns that the Forest Service should adequately analyze these cumulative effects in the Gravina Island EIS. In response to these concerns, the IDT strengthened the cumulative effects analysis in the Final EIS. Examples of some of these comments, and responses, are included below.

The cumulative effects from other planned timber sales in the region (Cholmondeley, Slide Ridge and Licking Creek) have not been considered.

“Land Divisions” in the Introduction to Chapter 3 describes the geographical areas analyzed for various affected resources. While these three sales were considered for effects, they are outside the geographical areas for which affected resources on the Gravina project would likely occur. In Chapter 3 of the Final EIS, each resource group discloses an area for which effects were considered and evaluated. In terms of their contribution to the Tongass-wide timber program, Gravina Timber Sale, Cholmondeley, Licking Creek, and other sales are addressed in Appendix A, Reasons for Scheduling the Environmental Analysis. A timber sale at Slide Ridge is no longer currently being planned.

The Gravina Island Timber Sale DEIS does not consider important contributors to cumulative effects. No attention is provided to other factors such as increased vehicle use and the Hard Link.

The DEIS fails to adequately disclose and evaluate cumulative and connected impacts.

The cumulative effects analysis in the DEIS fails to point out the scope of the analysis.

In response to these comments and similar comments from others, there is a more detailed description of effects in all sections of Chapter 3 of the Final EIS.

In general, the analysis of cumulative effects is limited in time to “past, present, and reasonably foreseeable future actions” (those that have happened, are currently planned or scheduled to occur). These actions can include National Forest System timber sales as well as land management activities of other landowners on nearby lands. For projects on National Forest System land, the 10-year Timber Sale Plan is used to identify future Forest Service actions. We also have contacted adjacent property owners about plans and scheduled actions on those properties. Reasonably foreseeable future actions are considered to be those that will occur within the next 10 years. Chapter 3 of the EIS discloses the cumulative effects by affected resource.

The geographical or spatial scope of analysis, in which measurable potential effects are compared, can vary by resource. The spatial scale of analysis is disclosed by resource in Chapter 3 of the Final EIS. For instance, it is reasonable to analyze effects to water quality by watershed (that area which drains to a common point) and to analyze effects to wildlife habitat by WAA (Wildlife Analysis Area). These land divisions are described in more detail in the Introduction section of Chapter 3 of the Final EIS. The Introduction also describes how Direct, Indirect and Cumulative Effects are analyzed in Chapter 3.

Your analysis fails to address end-of-rotation effects.

The Forest Service should be assuming that multiple entries and full implementation is “reasonably foreseeable.”

NEPA requires us to analyze the cumulative effects of proposed actions, to consider a project's effects in conjunction with past, present, and reasonably foreseeable future actions, including actions of others. When considering the impacts of individual projects with long-term impacts (e.g., timber sales, road construction, land exchanges), project analysts are often faced with the question of just what is reasonably foreseeable. How far in the future should we attempt to project future actions, either on NFS lands or elsewhere? Courts have held, generally, that when funding, planning, scheduling, or scoping of a project has begun, it is reasonably foreseeable.

On the Tongass National Forest, in the past, sometimes analysis has extended project-level cumulative effects to encompass a consideration of the effects of implementing all the activities permitted under TLMP, over the entire planning horizon, or through an entire rotation on a particular landscape. This has tended to confuse project-level analysis with validation monitoring of the Forest Plan, and resulted in analyses of hypothetical timber sales which might be planned 100, or even 200, years in the future. Timber sales scheduled on the 10-year sale schedule are considered reasonably foreseeable.

While the “end of rotation” analyses (e.g., of deer habitat), carried out on a landscape basis, do not provide useful information for evaluating site-specific project-level impacts, they do provide critical information for the Forest Service and

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partner agencies to evaluate the assumptions and analysis made in TLMP -- to determine whether the land allocation decisions remain valid. Landscape assessments include this information in the annual TLMP monitoring report, and use it to make necessary adjustments to the Forest Plan. This information should inform project-level decision-making, and be incorporated by reference in project-level NEPA documents as needed, but should not be taken as constituting a cumulative impacts analysis for a project-level decision.

The Gravina Island Final EIS includes an end-of-rotations effects analysis in the wildlife section of Chapter 3. For reasons explained here, this has been done separately from the cumulative effects analysis.

The effects of a 200-year rotation have not been adequately analyzed.

The analysis is flawed, as the 1999 Forest Plan ROD is no longer in effect.

The analysis of effects of timber harvest was based on a 200-year rotation for WAA 101 (Gravina Island) in the Gravina Island Draft EIS to be consistent with the 1999 Forest Plan Record of Decision. Subsequently, in *AFA v. USDA* (J99-0013 CV (JKS)), the U.S. District Court, District of Alaska vacated the 1999 Record of Decision for the Tongass Forest Plan and upheld the 1997 Record of Decision. As a result, in the Final EIS, effects were re-analyzed for a 100-year rotation to be consistent with the 1997 Forest Plan Record of Decision. The 1997 Record of Decision does not allocate any land use designations to a 200-year rotation. For a comprehensive overview on how the Gravina project relates to the Forest Plan please refer to Appendix A of the Final EIS.

Comment Type 15: Subsistence

The issue of subsistence was of concern to many people, especially rural subsistence users in Metlakatla. The project's potential impacts to deer populations and to the marine environment in Bostwick Inlet were among the most prevalent comments the Forest Service received. Impacts from both timber harvest and road building on deer habitat and hunter access are discussed in Chapter 3 of the Final EIS in the Wildlife; Biodiversity and Old Growth; Transportation; Subsistence; and Environmental Justice sections. Impacts of timber harvest, LTF construction, and barge activity on the marine environment are discussed in the sections Marine Environment, Log Transfer Sites, and Related Facilities; and Environmental Justice. See also Appendix C, Subsistence Hearings. Included below are some of the concerns expressed:

We disagree with your statement that under Alternative 4, increases in access and competition for deer may result in a significant possibility of a significant restriction on subsistence use of deer.

I disagree that Alternative 4 emphasizes positive economics and recreation access while maintaining the resources for subsistence users.

The analysis shows the finding that there is the possibility of a restriction to deer populations in all roaded alternatives. This is not a violation of ANILCA, rather a requirement of it. The increase in access would be greatest under Alternative 4, which leaves the mainline road open for motorized use. ANILCA requires that in the case of such findings, the Forest Service also holds hearings and displays possible mitigations to the possible restriction. This has been done. Information relating to the subsistence finding can be found in Chapter 3 of the Final EIS (see sections titled Subsistence, Environmental Justice, Roadless Area, and Wildlife; Appendix C of the Final EIS, and in the Wildlife resource report which is available in the project planning record).

Subsistence uses are not adequately presented and impacts to resources are not adequately disclosed in the DEIS.

During scoping, both Metlakatla and Saxman reported that Bostwick Inlet was an important subsistence area, but that much of Gravina Island is used for various types and levels of subsistence harvest. Salmon and other finfish, harvested in both freshwater and saltwater in and adjacent to the project area, are the most important subsistence resources for both communities (Forest Plan Final EIS, p. 3-603, 3-639). Other important resources mentioned during project scoping were Dungeness crabs, clams, mussels, kelp, and herring roe. In particular, both communities expressed concern over impacts to these resources resulting from construction and use of a log transfer facility in Bostwick Inlet.

Both communities also reported harvesting berries and cedar bark from the project area. These activities have historically occurred along beach fringe areas, which are protected by the 1,000-foot beach buffer. Among other potential subsistence resources, the total reported numbers harvested from 1999 to 2002 were as follows: 3 beaver, 4 black bears, 0 marten, 27 river otters, and 9 wolves (ADF&G unpub. data). Both rural and non-rural hunters and trappers may have harvested these.

Impacts to subsistence resources continued to be raised as a primary concern between the Draft and Final EIS. Subsistence hearings were held in Metlakatla, Saxman, and Ketchikan, as required by ANILCA Section 810, giving individuals the opportunity to testify regarding their subsistence concerns; these hearings are published in their entirety in Appendix C of the Final EIS.

The distribution and abundance of the resources described above, and access to them, are not likely to be restricted by management activities related to the Gravina Island timber sale, however, competition for some resources could increase. Timber harvest would increase availability of berries in units in the short term but would decrease availability over the long term. Proposed roads would increase access to some subsistence resources either temporarily or permanently depending on alternative. Only under Alternative 4 would project roads remain open after the completion of timber harvest activities, although Alternatives 2, 3, and 6, which build roads but close them after the sale, provide increased walk-in access on the closed roads. See the Final EIS, Chapter 2, "Issue B: Subsistence", and Chapter 3, sections titled Subsistence, Environmental Justice, Roadless Area, and Wildlife, for a more complete discussion of subsistence issues.

Where is the studies or analyzed information to the consumption patterns of the subsistence users?

In the Final EIS, Chapter 3, Environmental Justice, there is a more in-depth discussion and information on consumption patterns by community, for subsistence resources, as described in the Forest Plan Appendix H, and in the Forest Plan Supplemental EIS (2003).

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Numbers for rural demand of deer may be severely underestimated.....the Forest Service needs better information.

The residents of Metlakatla, who report taking 75% of the deer they consume from Gravina, utilize more than 14 deer a year as a community.

The importance of deer harvest to rural users was a primary issue raised by the public. The Final EIS recognizes the possibility that subsistence use of deer may be under-reported. The Final EIS, Chapter 3, Subsistence section, paragraph "Subsistence Use of Deer", states that "Subsistence use of deer is well documented for the rural communities of Southeast Alaska (Forest Plan Final EIS, pp. 3-210 to 3-223 and 3-523 to 3-528). Estimates of community use of specific WAAs for harvesting deer are reported in Appendix H of the Forest Plan Final EIS", and "It should be noted that the numbers reported above are estimates based on ADF&G hunter surveys, which may underestimate actual deer harvest (D. Person, pers. comm.)."

The Forest Plan Final EIS, Appendix H states that 75 percent of the average annual deer harvest is reported to come from three Wildlife Analysis Arcas: WAA 101 (Gravina Island, 10 deer), WAA 303 (Duke Island, 4 deer), and WAA 1210 (Prince of Wales Island, 3 deer). (The other 25% would be from among other areas). Using these numbers, one could estimate an average annual total of 23 deer consumed, with 43 percent from Gravina Island.

Accurate and complete reporting of deer harvest numbers by hunters benefits both the resource and hunters by enabling ADF&G to manage game using the most accurate data possible. Since the Forest Service considers these reported harvest numbers as part of our project analysis, accurate numbers can also facilitate more realistic planning and impact analysis. See also the Final EIS, Chapter 3 sections titled Wildlife; Environmental Justice; and Biodiversity and Old Growth; and Appendix C, Subsistence Hearings.

The residents of Metlakatla currently have less access than people in Ketchikan and Saxman because they are farther away, and that wouldn't change if the roads were put in.

This factor is discussed in the sections Environmental Justice, and Subsistence, in Chapter 3 of the Final EIS. Roads, whether open or closed, will increase access to more areas of the island, and, as stated in the Subsistence section, "Alternatives 3 and 6 would likely have a greater impact on deer harvest than Alternative 2, especially by Ketchikan hunters, because the road would be connected to the existing airport transportation system on the east side of Gravina (via a new road to be constructed by Ketchikan Gateway Borough). Alternative 4 would have the greatest impact because the mainline roads would remain open after timber harvest is completed." In Alternative 2, the proposed road would be accessed at a proposed LTF site in Bostwick Inlet, which would afford similar access to Metlakatla, Ketchikan, or Saxman residents.

This hearing regarding logging on Gravina should be cancelled. It always goes against us.

Subsistence hearings are required by ANILCA when a Federal agency (such as the FS) proposes an activity that may have a significant impact on subsistence users. Additionally, the NEPA requires agencies to solicit comments on any ground-disturbing activity (such as a timber sale) so that the public can bring issues to the agency that should be considered in the design of the project.

Throughout the planning for the Gravina Island Timber Sale, the IDT has involved Metlakatla in discussions of the issues, development of the alternatives, public comment meetings and subsistence hearings (Final EIS, Chapter 1, and Appendix C).

Comment Type 16: Effects of Roads/ Road Closures and Enforcements

The impacts of road construction, and the maintenance and management of roads after harvest activities are complete was a concern in some letters. People were concerned with impacts such as erosion on watersheds. More information was requested on post-harvest maintenance and access; this has been added in the Final EIS. Road construction and post-harvest management is discussed under the Transportation section of Chapter 3 of the Final EIS; additionally, road-related impacts to individual resources are discussed under other sections including Watersheds and Fisheries; Soils; and Wetlands and Floodplains. Following are some of the comments received, and Forest Service responses:

The DEIS does not adequately assess the impact of roads to the aquatic environment.

Roads can fragment habitat. In the case of aquatic resources, the Final EIS discusses fish resources and identifies all road/stream intersections in the project area. Since 1999, the Forest Service has worked very closely with the State to ensure that design plans for new crossings help ensure that fish passage will be provided under almost all conditions.

Recently, Masters student Katherine McGee studied the effects of forest roads on surface and subsurface flows in a wet forested soil near 12-Mile Arm on Prince of Wales Island. McGee found that the road ditch intercepted nearly all of the area precipitation from upslope contributing areas. However, the amount of road-intercepted flow did not translate into equivalent changes in subsurface water levels, rather the changes in subsurface water levels are typically minimal. Where changes do occur, they tend to be concentrated immediately above the cutbank and below the road fillslope (McGee, 2000).

Effects of timber harvest and roadbuilding on the aquatic environment are described by alternative in Chapter 3 of the Final EIS in the section titled Watersheds and Fisheries and in the Watershed and Fisheries Specialist Reports in the planning record.

You mention rock overlay construction but fail to say what it is.

As mentioned in the Draft EIS, when it is necessary to construct roads on muskegs and forested wetlands, rock overlay construction techniques are required, which help maintain the biological functions of the wetlands and minimize the amount of side-ditching. Overlay construction consists of constructing the road prism entirely with borrow material. No excavation is required in these areas that are usually on relatively flat ground. The road prism is constructed by bringing in borrow material, usually very coarse (2 ft. minus) rock and laying it over the existing ground.

Logging and roadbuilding in this roadless area will damage important fish and wildlife habitat.

The Gravina resource analysis incorporates Forest Plan Standards and Guidelines in addition to Best Management Practices to ensure that fish and wildlife habitats are protected. The Forest Plan (Chapter 6) monitors effects from logging and road building on a yearly basis and documents that monitoring data in Forest Plan reports. Effects of timber harvest and road building on fish and wildlife habitat are described by alternative in Chapter 3 of the Final EIS in the section titled Wildlife and Fisheries. Additional information may be found in the Watershed and Fisheries Specialist Reports in the planning record. Appendix B in the Draft EIS and Appendix F of the Final EIS contain unit and road cards which identify the location of protective measures by specific units and roads for the Gravina project.

How will roads be maintained following harvest?

The Gravina Roads Analysis Process (RAP) identified travel management opportunities for the Gravina project. The Gravina RAP incorporates direction found in the 7700 section of the Forest Service Manual and the Forest Service Report FS-643. A RAP is prepared using an interdisciplinary team of resource specialist to identify transportation opportunities for an area of land commensurate with Forest Plan Land Use Designations.

The action alternatives used the Gravina RAP as a basis for roading opportunities. Road Cards (Appendix B of the Draft EIS and Appendix F of the Final EIS) display and explain site-specific information about each road segment and disclose resource concerns and mitigation measures to be applied. Each road card identifies a travel management strategy and provides a travel management narrative describing the management and maintenance strategy for each road segment. Travel management varies by action alternative and all roads may not be in all the alternatives. Chapter 2 discusses the travel management themes by alternative.

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Does suggesting access for recreational purposes change the guidelines for a logging road for the Corp. of Engineers?

What about 404 permits?

For 404 permits, BMPs must be applied. "Included in these BMPs are the requirements that road fills shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flow; that the design, construction, and maintenance of road crossings shall not disrupt the migration of aquatic life inhabiting a water body; and that all temporary fills shall be removed in their entirety and area restored to its original elevation. These BMPs must be integrated into the design of the proposed project,if the BMPs are not implemented, and the roads are left for recreational purposes, they become unauthorized fills under Section 404 the Clean Water Act and could be subject to enforcement by the Corps of Engineers (Crops) or EPA.." BMPs are integrated into the design of the proposed work, and implemented, whether the road are left open for recreational use, decommissioned or closed in a maintenance-free condition for future use.

When a decision is made to have roads remain open for other than silvicultural purposes, 404 permits will be obtained where roads will be open and maintained following harvest (Alternative 4) and used for other activities not related to silviculture; the subsequent use of these roads would be subject to Corps. authorization by issuance of a permit.

Road maintenance and closure procedures are discussed in the Final EIS, Chapter 3, Transportation section, under the topics "National Forest System Roads" and "Access Management".

There is no impact analysis done in the Transportation section.

An analysis of direct, indirect, and cumulative effects by alternative has been added in the Transportation section of Chapter 3 in the Final EIS.

The DEIS does not address how the USFS will prevent non-motorized access to local resources, enforce motorized access restrictions and access violations.

The Gravina Island Final EIS does consider how the roads proposed in Alternatives 2, 3, 4 and 6 will be managed and how closures will be enforced. After sale activities are complete, project roads will be closed to all motorized vehicle use in Alternatives 2, 3 and 6 through a Special Forest Order and installation of a gate near the National Forest System land boundary. In addition to the gate and Special Forest Order, "closure" consists of removing culverts and bridges at stream crossings. (See descriptions of Maintenance Levels in the introduction to Transportation section in Chapter 3 of the Final EIS.) Rather than "prevent non-motorized access to local resources", the roads would be open to non-motorized (ie, foot and bicycle) traffic, thereby enhancing recreation opportunities (see Chapter 3, Recreation section).

In Alternative 4, the mainline road is left open to public motorized traffic; other spur roads would be open to non-motorized traffic.

The Special Forest Order would identify roads restricted by the order, the time the restriction would apply, what type of use is prohibited, and who is exempted from the order. A Special Forest Order (36 CFR 26.50b) allows law enforcement personnel to issue citations to persons in violation of the order. Random patrolling by law enforcement and forest service personnel would be conducted to ensure compliance.

Comment Type 17: Impacts on Wolves

Some letters contained comments regarding the wolf den and wolf population on Gravina Island. Many of these concerns centered around the additional access that roads could give hunters and trappers. The IDT considered these factors during road location and alternative design. A complete discussion of the project's potential impacts to wolves is contained in the Wildlife section of Chapter 3 in the Final EIS under "Direct and Indirect Effects on Wolves". Some of the concerns expressed are included below:

A known wolf den could be affected.

The USFS states that the loss of the Gravina Island wolf pack would not likely threaten the viability of the distribution of the species forest-wide. This rationale appears contradictory to the direction given in the TLMP Wildlife Standards and Guidelines (pg 4-110).

The Forest Service takes wolf management on Gravina seriously, and has taken many steps to minimize effects on wolf populations in all alternatives. For example, Forest Plan Standards and Guidelines are followed as they apply to road location in all roaded alternatives and high-value deer habitat in Alternative 3 is protected (protecting high-value deer habitat protects wolf population primary prey species). In particular, Alternative 5 avoids building any road to avoid impacts associated with roads, which in this instance could cause increased hunting pressure. All applicable Standards and Guidelines are followed.

Even with no roads, a large proportion of the single wolf pack on the island gets trapped in some years (for instance, packs average 5 to 9 individuals, and in 1992, 6 wolves were (legally) harvested on Gravina). A road system on Gravina would probably result in increased harvest of wolves and, therefore, a higher likelihood that in any given year the entire pack could be harvested, regardless of whether roads are closed after the sale. They would likely disappear quicker with open roads. The loss of this pack would not keep the Forest Service from meeting the definition of viable populations "well distributed" across the Forest.

As far as meeting Standards and Guidelines, under all alternatives, the road would meet Forest Plan Standards and Guidelines, which prohibit road construction within 600 feet of known active dens (Forest Plan, page 4-117). A wolf den that was active in 1998 and 1999 was located in the project area. It was not active in 2000 to 2003, although evidence suggested another den in the same general area, which has not yet been located. The activity restrictions no longer apply if dens are inactive for 2 years. Den activity status will be checked before any roadbuilding activity takes place.

See also "Direct and Indirect Effects on Wolves" in the Wildlife section of Chapter 3 in the Final EIS.

Comment Type 18: Deer Model

Some comment letters questioned the deer model, or the results of the deer model used in the analysis of the Gravina Island EIS. Some of those comments are included here, with responses, to help clarify the discussions in Chapter 3.

The deer model that predicts 90-98 percent reduction in deer habitat capability does not appear to reflect actual conditions in a 26 year old second growth stand.

Although deer use is traditionally quite high in recently harvested stands, use, particularly for feeding, decreases as the canopy starts to close, excluding understory vegetation. At around age 26, most young-growth stands in SE Alaska have reached this stem exclusion stage. It is this change that is reflected in the habitat suitability index (HSI) scores used for the deer model. The scores are a relative measure of the quality of a particular stand for use during the winter by deer. The percent change in the score given to a particular stand does not equate to the same percent change for overall habitat capability in the project area. The deer model used in the Final EIS shows a decline of 4 to 9 percent in the project area habitat capability during the stem exclusion stage. Cultural treatments, such as thinning and pruning have proven effective in allowing enough sunlight to maintain the understory for a short period of time.

The DEIS does not adequately address the serious discrepancy in between the deer habitat capability losses estimated in TLMP for the WAA in this project and those presented in this DEIS.

Losses in the Forest Plan represent the worst-case scenario over the length of rotation (every acre of suitable and available timber would be harvested). This EIS presents effects from this project only. Updated and more accurate GIS coverages were used in this analysis than during the large-scale Forest planning process. The deer habitat capability model was run between Draft EIS and Final EIS to account for recent changes in direction (2001 Monitoring Report) regarding the standard multiplier in the model. Also, the correct acreage is used in the Final EIS for calculating the density of deer per square mile shown in the wolf section (an error was made in the Draft EIS).

The deer model needs to be used consistently across the Tongass.

We are currently working on verifying John Caouette's structure class model. We hope to use this in the future to model changes in habitat more accurately. The Forest Service periodically reviews and updates the information used in the deer model and works with the Forest-level biologists to achieve consistency among districts. The model is standard in all areas of the Forest so differences are likely due to the manner in which results are presented to the public. In a few instances, a site-specific agreement with ADF&G was reached for the number of deer/square mile to use in the model. Although this changes the overall habitat capability number produced by the model, it does not change the evaluation of alternatives (ie, the actual number of high-value acres affected by an alternative does not change).

The DEIS claims that non-traditional clearcutting prescriptions means that the results of the deer model are likely to overestimate the impacts of timber harvest on deer habitat capability. There is no data to support this claim.

The Final EIS, Chapter 3, Wildlife section, paragraph "Deer Habitat Modeling" states, "Further, it should be noted that the habitat capability model assumes that all timber harvest is accomplished using traditional even-aged (clearcut) silvicultural systems. However, other silvicultural systems (uneven-aged or two-aged) would be used on some harvest acres for the current project, depending on alternative (Table 3-3, Silviculture and Timber Management section). Although the effects of these alternative harvest methods on deer habitat capability are currently unknown, results of the model **may overestimate** the impact of this type of timber harvest on deer habitat capability." (Emphasis added).

Uneven-aged and two-aged silvicultural systems are not "clearcutting prescriptions". Since these systems leave from 30 to 75 percent of the basal area in the stand (see Silviculture and Timber Management section, "Silvicultural Systems"), it is reasonable to state that project impacts (which are estimated based on clearcutting that leaves little or no stand structure after harvest) **may be overestimated**.

In addition, the Gravina project analysis assigned non-National Forest System ownerships a zero habitat capability (worst-case scenario). This underestimates the current capability of these lands as well. In the interest of fully disclosing maximum potential effects, a worst-case scenario assuming zero habitat capability on non-NFS land and all clearcut harvest for project alternatives is presented.

Comment Type 19: Marine Environment

The location of log transfer facilities, and their potential effects on the marine environment, particularly Bostwick Inlet, was a topic in several comment letters. The Final EIS, Chapter 3, Marine Environment section expanded upon the discussion of Marine Environment effects that was in the Draft EIS. In addition, some of the concerns expressed in the letters are included below:

I don't know or pretend to know the "scientific" degradation that comes when the bark comes off during handling at a log transfer facility. I just think this is a bad idea.

The Alaska Timber Task Force Siting Guidelines for LTFs is designed to mitigate the potential effects of bark dispersal and toxicity by locating the sites in the least productive areas and where currents are strong enough to disperse sunken or floating debris.

In addition, all active LTFs receive a yearly underwater diving and sampling transect, as required by the Environmental Protection Agency, to ensure the area of 100 percent bark deposition is less than 1 acre. Prior to use of an LTF for watering logs, an underwater survey is done to establish a baseline for effects of bark on the marine environment.

"Effects of Site Bark Deposition" in the Marine Environment, Log Transfer Sites, and Related Facilities section of Chapter 3 in the Final EIS describes the potential effects of bark deposition on coastal marine resources.

Nowhere do you discuss the concrete criteria for the selection of LTFs....Bostwick dive reports appear to demonstrate that it is a poor LTF site.

Prior to construction and/or operation of log transfer facilities, a permit for these activities is obtained through the Corps of Engineers and the State of Alaska. In order to obtain this permit, all applicable requirements of the Clean Water Act must be met including the EPA's NPDES requirements.

Project analysis uses the information the USFWS provides in their dive report, which can be found in the project planning record. As described in the Marine Environment, Log Transfer Sites, and Related Facilities section of Chapter 3, Alternative 2 is the only alternative that would construct a new land-to-barge bulkhead LTF, located in Bostwick Inlet. Figure 3-3 of Chapter 3 in the Final EIS shows three sites that originally were considered in Bostwick Inlet for an LTF. Of these three initial potential locations, site Bos 1 was deemed unsuitable and site Bos 2 is preferred over site Bos 3, as site Bos 2 requires less fill. Based on a marine assessment and the dive survey (completed by USFWS June 9, 2000), the proposed Bostwick Inlet site Bos 2 would require a rock-filled bulkhead extending 200-250 feet out from shore (similar to a jetty), in order to gain adequate depth. This facility would remove approximately 0.25 acre of marine benthic habitat in Bostwick Inlet. The facility would be designed for use at all times and tides.

The sea current at the proposed LTF at Bostwick Inlet was found to be sufficient for a land-to-barge facility, to flush suspended bark and minimize deposition at the end of the bulkhead, although it is likely that eddies would be created adjacent to the bulkhead near the shore. Its design would comply with the Alaska Siting guidelines. As part of the permitting requirements, survey dives would be conducted yearly while the site is active. (Final EIS, Chapter 3, Marine Environment, Log Transfer Sites, and Related Facilities section). The LTF would be decommissioned upon completion of the timber harvest activities.

The DEIS fails to take a hard look at the effects to aquatic environments from logging, road and LTF construction.

The analysis of the potential effects of harvest operations on the aquatic environment is strengthened in the Final EIS. Potential effects of the project on aquatic environments are discussed in the Watersheds and Fisheries, and the Marine Environment, Log Transfer Sites, and Related Facilities sections of Chapter 3 of the Final EIS.

One of the management objectives of the Forest Plan is to maintain or enhance aquatic productivity. By applying the Riparian Standards and Guidelines in the project area, we will maintain aquatic productivity. We do not expect any change in aquatic and marine productivity.

As stated in the Essential Fish Habitat portion of the Watersheds and Fisheries section in Chapter 3, the Forest Service anticipates no detectable effects on fish habitat due to implementation of the timber sale. We would implement the Standards and Guidelines for protection of fish habitat from the Forest Plan and the applicable Best Management Practices. More detailed information on our analysis of the project's potential effects, by alternative, on project area watersheds and fish habitat is available in the Watersheds and Fisheries section of Chapter 3.

Appendix B

Effects to the marine environment could occur from LTF construction, or helicopter-to-barge and helicopter-to-log boom operations. Alternative 2 is the only alternative to propose constructing an LTF, which would be a land-to-barge system in Bostwick Inlet. Other action alternatives propose flying logs from helicopter yarding units directly to barges or log booms, located in coves and inlets near the units being harvested. A description of the potential effects, by alternative, of these operations is included in the Marine Environment, Log Transfer Sites, and Related Facilities section of Chapter 3.

The existing log transfer facility on Gravina Island, a privately owned facility, is a permitted site that must adhere to the same permit requirements as any site. Bark accumulations must be within the limits specified in the permit or the site would not be in operation.

Where will the barge locations be?

The exact final locations for barges and log boom drops used during helicopter logging are determined by the purchaser during the permitting process. The permits are issued and administered by the State of Alaska as this type of activity takes place in marine waters administered by the State of Alaska. The most suitable locations for log booms or barges would be near the units being harvested, in coves and inlets around the south end of Gravina Island including Phocena Bay (or Clarence Strait), Dall Bay (or Nichols Passage), and outer Bostwick Inlet.

While the IDT has analyzed potential impacts of harvest operations to marine resources at these locations, the Forest Service has no authority to determine final locations of these barges. Potential impacts to marine resources at the final selected locations are analyzed and determined by the State of Alaska during the permitting process.

The DEIS fails to address sortyards.

The Marine Environment, Log Transfer Sites, and Related Facilities section of Chapter 3 in the Final EIS addresses sortyards, as well as related topics including log transfer facilities.

Temporary upland storage of logs would take place at the existing Pacific Log and Lumber Mill site on the west side of Tongass Narrows for Alternatives 3, 4, and 6. For Alternative 2, the log transfer facility would be a land-to-barge site located on the east side of Bostwick Inlet, and would include a 1- to 3-acre sortyard near the Bostwick LTF. This would require a log transfer access area, a small airplane and boat dock, and an equipment off-loading ramp, which are part of the LTF permitting process. Upland development would consist of temporary structures such as maintenance shops and fuel storage tanks. These facilities would have minimal permanent visual resource impacts. Log sortyard areas are usually required for barge facilities where sorting by raft is not possible. The LTF, sortyard and associated facilities would be decommissioned upon completion of the timber harvest activities.

Proposal 4 doesn't show the road in Bostwick but in reality it will be there to support the log dump.

Alternative 2 is the only alternative which proposes a road to a log transfer facility in Bostwick. The proposed road in Alternatives 3, 4 and 6 does not go into Bostwick Inlet. Alternatives 3, 4 and 6 propose the use of the existing facility at Pacific Log and Lumber on the Tongass Narrows, and helicopter drops to a fully contained log barge or log boom in Bostwick Inlet. Alternative 5 proposes use of contained barge drops in various locations around the island including Bostwick Inlet.

The use of Seal Cove would be a good LTF site.

Seal Cove was considered as an LTF but failed to meet a number of Forest Plan (Appendix G) LTF Siting Guidelines. In particular, this location is too shallow, lacks log storage potential, entrance and departure to the bay is dangerous to ships and tows, and this site would have poor bark dispersal due to the shallow reef at the entrance to the cove hindering tidal exchange.

However, there are suitable anchorages near Bostwick Point and Seal Cove which the purchaser may opt to use for helicopter-to-barge log drops from nearby units. Sites along Nichols Passage are exposed to storms and their use would be highly weather-dependent. See Final EIS, Chapter 3, Marine Environment, Log Transfer Sites, and Related Facilities section, "Log Drop Locations".

Retain the LTF instead of pulling the shot rock. State agency landowners and recreationists can then use it.

The proposed LTF, if constructed, would be closed at the completion of silvicultural activities, whether Forest Service-related or any other permitted activities. The LTF would not be available for public access after closure.

The discussion of structural embankments is confusing in the Draft EIS.

The Final EIS expands the description of structural embankments and their potential impacts. See the section Marine Environment, Log Transfer Sites and Related Facilities in Chapter 3, paragraph titled "Effects of Structural Embankment".

Comment Type 20: Hunting

Potential project impacts to deer populations on Gravina Island, and the resulting impact to hunters, was a concern raised by many people. Both subsistence (rural) users and non-rural users hunt deer on Gravina Island. Some examples of suggestions the Forest Service received are listed here:

Gravina has always had a relatively good overwinter deer survival and deer numbers. If greater hunter opportunities ever results in too much hunting pressure, then the problem should be managed by ADF&G season and bag limits rather than by closing public access. The Draft EIS makes increased hunting pressure on Gravina Island deer. The goal should be for maximum feasible sustained deer yield.

Managing wildlife populations requires a combination of habitat management, access management, and harvest management. The Alaska Department of Fish and Game manages harvest by setting the season and bag limits and, in this case, the Forest Service manages the habitat and some of the access. Agencies with management authority must work together to ensure healthy populations of the various wildlife species. Therefore, it is important to analyze the potential effects of changing the habitat conditions, as was done in this EIS. ANILCA section 810 also plays a part in the analysis. Gravina Island is identified as an important subsistence use area by Federally qualified subsistence users (rural residents). ADF&G does not regulate subsistence on Federal lands. Therefore, options for protecting subsistence while providing a timber supply and recreation opportunities were analyzed. Closing roads is just one of those options.

Comment Type 21: Range of Alternatives

After the Forest Service identifies a Purpose and Need and the Proposed Action, alternatives to the Proposed Action are developed, based on issues or concerns identified both by the FS IDT and by the public. Some letters commented that an adequate range of alternatives was not developed in the Draft EIS, or that some of the alternatives were not viable and therefore not reasonable. Incorporating suggestions for harvest that builds no roads (helicopter only) or varies harvest techniques or volume levels does affect the economics of the alternatives. In response to public comment, another alternative, Alternative 6, was added in the Final EIS. Responses to some of the comments the Forest Service received are included below:

Substantive comments which were raised during scoping and not responded to include: Failure to develop an adequate range of alternatives.

The Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) require that the alternatives, including the Proposed Action, respond to the underlying Purpose and Need for the project (40 CFR 1502.13). In the Notice of Intent (NOI), published in the Federal Register, the Forest Service identified part of the Purpose and Need for the Proposed Action to seek to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest Timber. Appendix A of the EIS describes the reasons for scheduling the environmental analysis for the Gravina Island project area at this time.

The Gravina Island alternatives are designed to respond to the significant issues, while (1) meeting the Purpose and Need for the project and (2) complying with environmental regulations and Forest Plan Standards And Guidelines.

The alternative development process is described at the beginning of Chapter 2. This process considered alternatives which would be studied in detail and those which were considered but eliminated from detailed study. The ID Team used information from public scoping, including the significant issues identified for the project (Chapter 1), in conjunction with the field-verified unit pool and related resource information, to formulate alternatives to the Proposed Action. Meeting notes in the planning record also document the rigorous formulation of the range of alternatives. Four action alternatives were proposed in the Draft EIS to meet the stated Purpose and Need for this project. Alternatives were developed in response to specific issues. Alternative 3, for example, was designed specifically to address subsistence and wildlife concerns.

Several respondents to the Draft EIS requested the Forest Service to create an additional alternative in the Final EIS that would offer a volume intermediate between Alternatives 3 and 5. Other respondents were concerned that the alternative designed to be most favorable to fish and wildlife (Alternative 3) did not adequately protect subsistence uses related to fisheries, marine resources, and deer populations and habitat. Based upon these comments, a new alternative (Alternative 6) is considered in this Final EIS. Alternative 6 combines elements of the previously analyzed alternatives, addresses water quality concerns, and offers a volume intermediate between Alternatives 3 and 5.

The alternatives presented in the Final EIS range from 0 to 47 MMBF of timber volume. These alternatives represent a reasonable range of alternatives that address the issues and provide basis for choice to the decision maker.

Alternative 5 and Alternative 3 are unreasonable because they are not economically viable. They are “straw” alternatives.

As stated at the beginning of Chapter 2, the alternative development process was issue-driven and began with the determination of specific options that could be utilized to resolve each issue. Alternative 3, for example, was designed specifically to address subsistence and wildlife concerns. Alternative 5 was analyzed to respond to comments that timber harvest involve no road construction. The Social and Economic Environment section of Chapter 3 in the Final EIS displays the economic comparison of the action alternatives (Table 3-13, Financial Efficiency Analysis for the Action Alternatives, and Figure 3-2, Expected Bid Rate by Appraisal Quarter). Although Alternative 5, using helicopter harvest only, is not economically viable under current market conditions, all other action alternatives show positive values under current market conditions. If any alternative, including Alternative 5, appraised deficit at the time of offer, management standards could be applied to the alternative to improve the economics.

Alternatives to the proposed action are developed to respond to issues and concerns identified through public comments and by the IDT. (See Final EIS, Chapter 2, Alternatives). The alternatives considered suggest different possible approaches to meeting the Purpose and Need, which is to respond to the goals and objectives identified by the Forest Plan. The Responsible Official's decision is based on a reasoned choice, conforming to the Forest Plan, and is made after considering the environmental analysis, the issues, and all comments made during scoping and after the Draft EIS is published.

The purpose and need statements lack of specificity.

Chapter 1 of the Final EIS discusses the Purpose and Need for the proposed action. The Purpose and Need includes implementing Forest Plan direction for the Timber Production and Scenic Viewshed land use designations (Chapter 1, Final EIS) on Gravina Island. The Forest-wide goals and objectives include the broad range of management strategies described under the resource sections. The action alternatives represent different means of satisfying the Purpose and Need, by responding with different emphases to the significant issues discussed in Chapter 1 (Final EIS, Chapter 2, Alternatives Considered in Detail). Defining the Purpose and Need beyond the Forest Plan direction could constrain the decision maker in their selection of an alternative.

Comment Type 22: Procedural Violations

Some commenters felt that the Gravina Island EIS violated certain applicable laws, made erroneous statements, or included illegal processes. Chapter 1 of the Final EIS lists some of the laws pertaining to project planning on Federal lands (see “Applicable Laws and Executive Orders” in Chapter 1). In addition, some clarifications are included below:

The DEIS violates Executive Order 12898 by untruthfully stating that implementation of all alternatives would disproportionately affect low income and minority communities; this is not true for Alternative 1.

Executive Order 12898, Environmental Justice, directs Federal agencies to identify and address the issue of environmental justice, i.e., human health and environmental effects of agency programs that disproportionately impact minority and low-income populations. The Executive Order specifically directs agencies to consider patterns of subsistence hunting and fishing when an agency action may affect fish or wildlife.

When the Draft EIS was published, the Metlakatla tribal government expressed concerns both for opportunities for small scale harvest opportunities and impacts on subsistence resources. In the Draft EIS, it was concluded that Metlakatla could be disproportionately impacted in that Alternative 1 does not provide timber which could create employment, and through the action alternatives, which could have a disproportionate impact on subsistence use.

However, more recently, residents and tribal governments of Metlakatla, Saxman, and Ketchikan have expressed even greater concern with the potential impact of the Gravina Island Timber Sale on subsistence resources, especially marine subsistence in Bostwick Inlet. In early 2002, all three federally recognized tribes prepared resolutions opposing timber harvest on Gravina Island. In the Final EIS, we have revised our discussion to conclude that economic benefits from the action alternatives would be greatest in the community where manufacture, economic activities, and services take place (Ketchikan), and that only the action alternatives could have a disproportionate effect to Metlakatla, due to subsistence concerns (see Chapter 3, Final EIS, Environmental Justice section).

Recent demographic information based on the Forest Plan SEIS (2003) has also been added to the Final EIS to strengthen the analysis and conclusions in the Environmental Justice section of Chapter 3.

Because this is a Draft of the Environmental Impact Summary, it is presumptuous to state that it complies with the National Environmental Policy Act.

The Forest Service has prepared the Gravina Island Timber Sale Environmental Impact Statement (EIS) on the potential effects of timber harvest and associated activities, including road construction on National Forest System lands on Gravina Island (see Figure 1-1) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This EIS is prepared according to the format established by Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508). The Interdisciplinary Team (IDT) used a systematic approach for analyzing the proposed project and alternatives, estimating the environmental effects, and preparing this EIS. The planning process complies with NEPA and the CEQ regulations. Planning was coordinated with the appropriate Federal, State, and local agencies, and local federally recognized tribes. The public, agencies, and tribes were involved in development of the issues and alternatives through public meetings, interdisciplinary team meetings, letters and personal conversations (Chapter 1, Final EIS, Introduction).

The process of publishing a Draft EIS for public review and comment, and then a Final EIS, is directed by 40 CFR 1502.9, Draft, final, and supplemental statements, which states, “Except for proposals for legislation as provided in Sec. 1506.8 environmental impact statements shall be prepared in two stages and may be supplemented”.

The Forest Plan does not designate Gravina Island for timber development.

The Forest Plan (Forest Plan FEIS, p.3-642 for Alt. 11) text erroneously identified Gravina Island as non-development, stating, “.....Gravina Island would be maintained in the current condition.”. The Forest Plan maps (see ROD foldout map and large color Alternative 11 map) are correct. The Tongass Land Management Use maps allocate Gravina Island to Timber, Scenic Viewshed and Old-growth Habitat Land Use Designations.

The number of public comments for or against the project should not have an effect on your decision. Management should not be by poll or popular vote.

The Responsible Official's project decision is not based on a count of votes. Every comment received is considered for its substance and contribution to informed decision making, whether it is one comment repeated by many people or a comment submitted by only one person. The emphasis in the comment review process is on the content of the comment

rather than on the number of times a comment was received. The comment analysis is intended to identify each unique substantive comment relative to the proposed Gravina timber sale to facilitate its consideration in the decision making process. All comments are considered, including both comments that support and that oppose the proposal. That people do not agree on how public lands should be administered is a historical, as well as modern dilemma faced by resource managers. However, public comment processes, while imperfect, do provide a vital avenue for engaging a wide array of the public in resource management processes and outcomes.

The Draft EIS comment period provides the public and other agencies opportunity to offer substantive comments on the proposed project. The CEQ Regulations for implementing NEPA (part 1503) outline the purpose of and procedure for soliciting comments on the proposed project. Substantive comments can disclose additional issues or offer additional information for the FS to consider, enabling the FS to modify or improve analysis or alternatives, or to evaluate and include additional alternatives. Chapter 1 of the Final EIS explains the public input process under the Public Involvement and Public Input sections.

I have pictures and GPS coordinates of at least ten bundles of logging slash near Granite Creek.

In the case referred to, the operator was cited and fined for inappropriate disposal of materials.

Comment Type 23: Cooperation with Other Landowners

The land on Gravina Island is under several ownerships, including National Forest System; State of Alaska agencies including Department of Natural Resources, State of Alaska Mental Health Trust, and University of Alaska; Ketchikan Gateway Borough including the Airport; and private land owners. (See Figure 1-1 in Chapter 1 of the Final EIS). The reasonably foreseeable activities of other landowners were considered in the cumulative effects analysis of individual resources in Chapter 3 of this EIS. People expressed concern with possible logging and development plans of these other agencies as well as the proposed Gravina Island Timber Sale project. Some of these concerns are described below; see also Comment Type 14: Cumulative Effects in this chapter.

Proposal 3 proposes road through a large area designated by the Federal Government as Mental Health - this is not feasible, much less possible.

Close coordination of fiscal resources and developmental goals between local, State, and Federal agencies is viewed as an important component of successful recreational development programs on the island.

The larger private in-holdings are: approximately 7,958 acres of State DNR land; 3,965 acres of Alaska Mental Health Trust land; 1,737 acres of University of Alaska lands; and 4,822 acres of land owned by Ketchikan Gateway Borough. The Alaska Mental Health Trust Land is not “designated by the Federal Government”. The Alaska Mental Health Trust supports a cooperative effort with other landowners as stated in letter dated June 22, 2001.

Coordinated timber sale planning is essential for meeting the goals of the Tongass Land Management Plan and in providing an orderly flow of timber to local industry. As part of this coordinated effort, the Forest Service is working closely with the numerous private landowners on Gravina Island. Coordination with adjacent landowners is discussed in Chapter 1 of the Final EIS under the Local Government and State and Federal Agencies sections. The Federal and State Permits, Licenses, and Certifications section of Chapter 1 of the Final EIS discloses the various permits that would have to be obtained prior to the implementation of a timber sale. Alternatives 3, 4, and 6 access NFS land by first crossing about 4 miles of Ketchikan Gateway Borough, Alaska Mental Health Trust, and State DNR land. Alternative 2 would require short easements on State DNR land.

The “road through a large area” unique to Alternative 3 referred to must be the additional approximately 3 miles that crosses State DNR land in the interior of the island. The Forest Service has worked with the State DNR and other landowners in coordinating with their plans while designing this project’s alternatives.

Logging and habitat damage on private land is controlled only by the inadequate Alaska State Forest Practices Act. We regard the damage caused by this type of logging as significant.

The Draft EIS described the amount of harvest occurring on other land ownerships by estimating the lineal feet of Class I, II, and III stream habitat adjacent to likely harvest units (pgs. 3-51,52). The Final EIS has added a discussion that predicts numbers of additional crossings and potential cumulative effects. The adequacy of other agencies’ management practices and the Alaska State Forest Practices are beyond the scope of the Gravina Analysis.

We hope there will be a way to stop Mental Health too but if you put in the roads they will come. It’s what they’re waiting for.

As shown in Figure 1-1 in Chapter 1 of the Final EIS, there are several other landowners on Gravina Island, including State agencies (Alaska Mental Health Trust, University, and State DNR) who have indicated they plan to do logging on their lands. (See Final EIS, Chapter 3, “Plans of Other Agencies” in the Introduction section.) While roadbuilding on National Forest System land could make access more economical for the State agencies, it is likely that logging will take place on State lands regardless of the alternative selected for the Gravina Island Timber Sale, as the State DNR has already indicated. The cumulative effects of potential logging on non-NFS land as well as on NFS land has been considered for all resources including Scenery (see Final EIS, Chapter 3, Scenery, “Cumulative Effects – Activities of Other Landowners”).

Maintain road only if the State of Alaska landowners want to use it for development purposes. Enter into an agreement that allows them to participate in maintenance.

The disposition of proposed roads, if constructed, would be in accordance with the Road Management Objectives described in the Final EIS and the roads analysis plan. Some roads will be closed but not decommissioned. In Alternatives 2, 3, 4, and 6, portions of the proposed road system would cross State of Alaska lands and require an agreement for access and maintenance (see Final EIS, Chapter 3, Transportation section).

Access to road segments on non-National Forest System lands would be managed under agreements with the Alaska Department of Natural Resources (DNR) and Ketchikan Gateway Borough, and future management of these segments is uncertain at this time. Generally, DNR manages their roads as closed after completion of silvicultural activities, in accordance with Best Management Practices (BMPs) and to conserve on maintenance costs. The Borough has indicated a desire to manage road segments on their lands as open. The Gravina EIS analysis assumes the Forest Service would maintain the 8100000 and 8105000 road segments on State and Borough lands consistent with management on NFS lands, by alternative, with the exception that we would not implement an administrative closure on them (Chapter 3, Transportation section).

Until the State of Alaska, Borough of Ketchikan, and numerous private landowners have fully contributed to the economics desired by communities, National Forest System lands should not be used.

Throughout the planning process for the Gravina Island Timber Sale, the other agencies on the island have participated with the Forest Service to design compatible projects. While none of these proposals or studies is dependent on another agency implementing a project, all are inter-related. Our analysis of the Gravina Island Timber Sale analyzes the effects on these possible projects at the preliminary stage (see Final EIS, Chapter 3, "Plans of Other Agencies" in the Introduction section).

Coordinated timber sale planning is essential for meeting the goals of the Tongass Land Management Plan and in providing an orderly flow of timber to local industry. As part of this coordinated effort, the Forest Service is working closely with the numerous private landowners on Gravina Island. Timber from Gravina Island is being proposed as part of the multiple use mission of the Forest Service as identified in public laws. Land use designations for timber harvest on Gravina Island National Forest System lands was decided in the Forest Plan. This is not a question of whether timber harvest should occur on NFS lands OR other agencies' lands. These are independent questions.

Comment Type 24: Impacts on Watershed, Soils, Slopes, Karst

The potential for project-related impacts to watersheds and wetlands, soils, and karst was a concern expressed in some letters. Forest Plan Standards and Guidelines, and BMPs are adhered to during project planning and implementation to prevent or reduce effects or risks to these resources. Measures such as stream and soils surveys, stream buffers, logging suspension requirements, and stream crossing requirements help protect these resources. Responses to some of these resource concerns are given below:

The sediment risk analysis ignores the fact that many streams in Southeast Alaska are nutrient poor and often benefit from small increases in sedimentation.

The sediment risk analysis disclosed in the Final EIS does not analyze nutrient delivery that results from stream disturbance and subsequent sediment delivery. Nitrogen and phosphorous, especially phosphorous, are typically the elements most likely to be deficient in Southeast Alaska streams. This comment assumes that should some type of slope failure occur that delivered small amounts of sediment, it would increase phosphorous levels in the stream. While phosphorous may be delivered to the channel, typically it is bound to soils, or existing in an insoluble form, and therefore not available to primary producers (small plants that capture nutrients and make them available to the food chain) as it passes thru the stream (Edwards, 2001). Even if one or both of these elements were available for use, this comment assumes that the sediment introduced would benefit primary production and therefore be beneficial to the stream overall. Yet, sediment (which ranges from dissolved compounds, to fines, to gravel, to boulders) may alter the shape and function of the stream channel, and even though productivity would be increased for primary producers, the overall effect on the channel could still be negative. Therefore, Forest Plan Standards and Guidelines for road building and timber harvest attempt to avoid or minimize impacts to the channel that result from management activity.

The DEIS fails to conduct a watershed analysis.

Appendix J of the Forest Plan clearly states that a watershed analysis is not required when full Standards and Guidelines are applied to a project, as is done on the Gravina sale. With that said, it is important to note that we did include many components that are normally used for a watershed analysis in the Fish and Water section of the Draft and the Final EIS. We included some of the tools/summaries normally used in a Watershed Analysis so that interested reviewers would be able to see much of the information that was used to consider effects to the aquatic environment. In addition to all the information that we have provided in this document, we have also directly met with decision makers on this project to explain our resource analysis, so that they can make an informed decision.

An interagency group composed of scientists and resource managers developed Forest Plan Riparian Standards and Guidelines. Because there is a lack of peer-reviewed scientific literature that effectively describes the range of management associated impacts to the aquatic environment, the group followed AFHA recommendations and established conservative standards and guidelines that are intended to maintain or restore the natural range and frequency of aquatic habitat conditions on the Tongass National Forest. When Standards and Guidelines are followed, cumulative effects to the aquatic resource are not expected.

In the Record of Decision (May 1997), the Regional Forester wrote, "Accordingly, the decision was made to develop new riparian management direction for the Final EIS that would apply to all watersheds across the Forest, wherever land-disturbing activities are allowed. Another decision was made to incorporate all the recommendations made in the Anadromous Fish Habitat Assessment (AFHA) report for additional protection because AFHA is the most comprehensive and credible scientific review of the measures needed to protect fish habitat on the Tongass." He further stated, "The standards and guidelines and other direction of the Forest Plan I am approving today meet or exceed all of those recommendations made in the Anadromous Fish Habitat Assessment (AFHA) report for additional protection, and include some of the features from Option 1. These standards and guidelines will be applied in all watersheds of the Forest, and are sufficient to protect fish habitat and provide for sport and commercial fisheries and subsistence." The Gravina Island Timber Sale follows all Standards and Guidelines direction.

The Gravina Timber Sale will degrade water quality and watershed condition.

At minimum, the Forest Service always manages for sustainability of aquatic life. The beneficial stream use designation for streams on Gravina is for aquatic life. Based on the results of initial turbidity monitoring (TNF Monitoring and Evaluation Report for FY 1999) turbidity as a result of culvert installation will likely be within State Water Quality Standards for Aquatic Life. The assumption that BMPs will be effective in preventing degradation of water quality for the turbidity standard is supported. See the Watershed and Fisheries section of Chapter 3 in the Final EIS.

Your watershed assessment is inadequate.

Watersheds are evaluated by interdisciplinary teams based on common attributes to estimate the response of soil and water resources to timber harvest. The Watershed and Fisheries section of Chapter 3 in the Final EIS describes how Sediment Risk Index (SRI) methodology is applied in the analysis of the watersheds in a project. The SRI methodology was not created to provide an absolute, or “true” measure of risk, nor has it been used as such. The SRI is a relative ranking that gives a score of 100 to the watershed in the analysis area with highest risk of transporting sediment to depositional areas. All watersheds included in the Geomorphic Risk Assessment (GRA), which evaluates multiple, hydrologically-independent watersheds, are assigned scores relative to the watershed receiving the score of 100. The SRI helps identify risk by assigning numerical rankings to watersheds based upon a combination of their physical characteristics, such as gradient and landforms associated with the watershed. These measurements (elevation, basin area, streams, etc.) are summarized by watershed, entered in the model, and the results are used as a starting point to compare basin energy and risk for the watersheds within the project area. The SRI results are not a final product that determines management activity. The SRI results were disclosed in the Draft EIS for review by those members of the public with an acute interest in this kind of information. The SRI results helped the Gravina Interdisciplinary Team minimize subjectivity and prioritize selection of field visit sites.

Watersheds 1, 6, 7, 8, and 9 were excluded from watershed assessment because of their relative small size and lack of developed stream networks. Specifically, these “watersheds” covered less than 1 square mile and had stream networks that were second order or smaller. Because of their relative small size and simple stream order, they did not qualify as true watersheds, as described by the U.S. Geological Survey requirements.

The DEIS fails to address the effects of project activities on wetlands.

Approximately 71 percent of the Gravina project area is comprised of wetlands (Table 3-40, Wetlands and Floodplains section, Chapter 3, Final EIS). Given the large percentage of wetlands throughout the project area, it is impossible to avoid all wetlands. Table 3-42 displays the acres and miles by alternative of impacts of proposed roads on project area wetlands, and Table 3-43 displays the acres and percent by alternative of proposed timber harvest on project area wetlands. The action alternatives propose timber harvest on between 4 and 15 percent of forested wetlands in the project area (Table 3-43).

When it is necessary to cross wetlands, appropriate BMPs and mitigation measures are incorporated into road designs. By minimizing the amount of side-ditching, effects upon groundwater flow and alteration of soil moisture levels are minimized. McGee (2000) found that drainage ditches collect and divert overland flow and shallow subsurface flow to the nearest stream channel, resulting in minimal effects on soil wetness in the wetlands adjacent to the road prism (Wetlands and Floodplains, Chapter 3, Final EIS).

Road construction will involve minimal excavation and will therefore result in little disturbance to ground vegetation. A coarse-graded shot is used in an overlay type construction that allows water to drain. The roads will be designed to direct road surface water away from live streams to help protect the watershed from sedimentation. Executive Order 11990 states “the Nation may attain the widest range of Beneficial Uses of the environment without degradation and risk to health or safety, each agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding, the head of agency may take into account economic, environmental, and other pertinent factors.” While riparian wetlands are considered high value and maintenance of important functions and values are a high priority for management of the project area, the decision maker has latitude to choose an alternative that maximizes beneficial uses of the environment while taking economic, environmental, and health and safety factors into consideration.

Explain the problems with using ground-based equipment on moist soils and steep slopes. Why has running skyline replaced high-lead cable systems?

The use of ground-based harvest systems, such as shovel yarding on moist soils and steep slopes without mitigation, can cause soil disturbance due to weight distribution problems. Moist, soft soil conditions in conjunction with steep slopes found in the project area limit the use of ground-based equipment operation. Approximately 7 percent of proposed harvest units lend themselves to shovel logging with track-mounted log loaders (Silviculture and Timber Management, Chapter 3, Final EIS). Ground-based systems are generally not permitted to be used on slopes over 30 percent. A mat of limbs or unmerchantable material is required to be laid down beneath the tracks of the equipment to mitigate soil disturbance. The number of passes over one area is also restricted. The use of running skyline has replaced high-lead cable systems because running skyline systems are better at achieving log suspension.

Appendix B

The DEIS provides inadequate information on the location of karst.

The Final EIS adds additional information on karst locations, including a map (see Figure 3-14, Karst Areas in the Gravina Island Project Area), in the Geology, Minerals, and Karst section of Chapter 3. This information is also available in the Soils, Minerals, and Geology Resource Report which is available in the planning record.

The DEIS avoids Issues addressed in the Scoping Letter: Unique resource of karst.

The Geology, Minerals, and Karst section of Chapter 3 in the Final EIS describes karst development on Gravina Island and breaks down karst lands into classifications of low, moderate, and high vulnerability. There are 4 acres of high-vulnerability karst land identified on Gravina Island - no harvest is proposed on any high-vulnerability karst land. Among the action alternatives, between 25.7 and 76.5 acres of harvest (helicopter yarding only) are proposed on carbonate, moderate-vulnerability karst. Table 3-34 in Chapter 3 displays Effects of the Alternatives on Low and Moderate-vulnerability Karst Lands. No karst-developed caves were found adjacent to or within the proposed harvest units. Several talus caves, reported by members of the Glacier Grotto to the USFS during project scoping, were located within metarhyolite rock, but no talus caves were found within any of the project area units.

The DEIS avoids Issues addressed in the Scoping Letter: Unique resource of muskegs.

Muskegs, most commonly found in broad valley bottoms, on rounded hilltops and on rolling lowlands in the project area, are mentioned in several sections of Chapter 3 but discussed in the greatest detail in the Wetlands and Floodplains section of Chapter 3 in the Final EIS. Table 3-40 gives a breakdown by acre and percent of each of the wetland types, including muskegs, on Gravina Island.

The DEIS fails to quantify risk of landslides.

Cutting on some slopes over 72 percent violates the Forest Plan.

The Soils section of Chapter 3 in the Final EIS addresses the issue of mass movement erosion (landslides). Landslides are a form of natural disturbance found throughout Southeast Alaska; however, timber harvest and logging roads can increase the frequency of slides, which can damage valuable aquatic resources. The Forest Service uses a Mass Movement Index (MMI) to identify potentially unstable sites in a project area. MMI is based on several soil and ground characteristics, and rates the relative stability of the soil into one of four classes of landslide potential: 1 (low), 2 (medium), 3 (high), and 4 (very high). Table 3-35 in Chapter 3 of the Final EIS displays the acres, by MMI Class, of soils on Gravina Island. The Soils section describes the potential effects of harvest activities on soils, including risk factors for landslides.

In order to reduce the risk of landslides associated with managed land, the Forest Plan dictates that very high mass-movement-index soils and soil map units (SMUs) with slopes 72 percent or greater are classified as unsuitable. However, the Forest Supervisor or District Ranger may approve timber harvest on slopes of 72 percent or more on a case-by-case basis, based on the results of an on-site analysis of slope and Class IV channel stability and an assessment of potential impacts of accelerated erosion on downslope and downstream fish habitat, other beneficial uses of water and other resources. Potential harvest units with slopes greater than 72 percent were field reviewed by a soil scientist according to Forest Plan Standards and Guidelines. Highly unstable areas were excluded from harvest. In some cases, the soil scientist identified slopes greater than 72 percent that are appropriate for timber harvest due to lower-than-MM1 4 landslide potential. In most harvest units, slopes exceeding 72 percent are short pitches adjacent to cliffs or rock outcrops, and do not present a high risk for mass movement. Table 3-37 in Chapter 3 of the Final EIS displays the acres of timber harvest proposed on slopes greater than 72 percent; these acreages were determined in the field. See the Unit Cards, Appendix B of the Draft EIS, for a site-specific description of the concerns associated with the harvest units.

Comment Type 25: Roading options should be considered for helicopter units on Gravina Island.

Some letters suggested that more road should be built, especially on the south end of Gravina Island, to reduce the amount of helicopter harvest proposed. This was not feasible, for the reasons explained below.

Build a road system to access to units 58, 60, 63, 64, 66, 68, 69, 70, 71, 72, and 104.

These units have been proposed as helicopter harvest to minimize adverse effects from road building on steep slopes, soil stability, fisheries, water quality, visuals, wildlife, and subsistence. The Bostwick area is particularly sensitive in terms of subsistence use and visual quality. Substantial adverse effects would be realized to these resources if road access would be made available.

Some of these units are not accessible due to steep slopes, so helicopter is the only option for harvest opportunity. In addition, down hill cable yarding would not meet the partial retention visual quality prescription for these units. Additional road construction would likely occur in the beach buffer, which is discouraged in the Forest Plan (FP 4-5) if reasonable alternative exist. Helicopter could be considered a reasonable alternative in light of the above adverse effects.

Provide road access to units 7, 14, 20, 23, 28, 36, 40, 46, 48, 54, 56, 100, 101, and 102.

These units have been proposed as helicopter harvest to minimize adverse effects of road building on steep slopes, soil stability, fisheries, water quality, visuals, and wildlife. For example, road access to Units 7 and 14 would require about 4 miles of new road construction, a bridge, and an easement to access these units. In addition, downhill cable yarding would not meet the partial retention visual quality prescription for these units.

Consider a road system to access units 73, 74, 75, 77, 78, 79, 80, 81, 86, 88, 89, 90, 91, 92, 93, 94, 95, 96, 105, 106, 107, 108, and 109.

These units have been proposed as helicopter harvest to minimize adverse effects from road building on steep slopes, soil stability, fisheries, water quality, visuals, wildlife, and subsistence. The Bostwick area is particularly sensitive in terms of subsistence use and visual quality. Substantial adverse effects would be realized to these resources if road access would be made available.

Many of these units are not accessible to cable yarding due to steep slopes, so helicopter is the only option for harvest opportunity. In addition, downhill cable yarding would not meet the partial retention visual quality prescription for these units. Additional road construction would likely occur in the beach buffer, which is discouraged in the Forest Plan (FP 4-5) if reasonable alternative exist. Connecting this area to the proposed road system for the rest of the project would also incur many additional costs such as bridges, fish passage, and easements, and be more costly than the use of helicopter yarding for this area. There was much public comment opposing any road construction to these units. Helicopter could be considered a reasonable alternative in light of the above adverse effects.

Comment Type S: Unit-specific Comments

Some comments offered specific suggestions for particular units or road areas, or had other specific questions or suggestions. These are annotated as "CT-S" in the comment letters. All suggestions were reviewed by IDT personnel; some had been previously considered and were determined to be unfeasible, other measures are already part of one or more alternatives. Comments are noted in bold-face text; responses to each comment follow.

The first 3 or 4 miles of access road from Tongass Narrows should be constructed with appropriated dollars. This road will access many future sales and get much recreational use. It does not make sense to lessen the economics of the timber sale by requiring the construction of this road as part of the timber sale offering.

Response: The construction of the first 3 or 4 miles of access road from the Tongass Narrows using appropriated dollars would make future sales and recreation use more economical from the project area. Other sources of funding or partnerships with other landowners and agencies will be researched.

In Unit 4, the clumps of reserve trees on the back lines should be incorporated into the cutting boundary to avoid isolating any of the timber behind the clumps. Ensure that there are adequate anchor stumps for the logging system.

Response: The clumps associated with the backline will be incorporated into the helicopter portion of the unit; as a result, no timber would be isolated. Field reconnaissance of Unit 4 indicates that adequate tailholds are abundant.

In partial-cut units, insure that small groups of trees are cut rather than individual trees. This will lessen the risk of injury to workers from snags and other hazard trees during harvest activities.

Response: Every effort will be made to insure that safety is maintained. Where individual tree selection is prescribed, all OSHA regulations will be followed during the sale administration. This would include the cutting of danger trees.

Drop Units 7 and 17 until a road system can be built to within no more than a mile of these units.

Response: Units 7 and 17 cannot be accessed by road without going through the OGR located to the north of these units, therefore we have elected to helicopter yard these units. The volume from these units will be helicopter yarded to Grant Cove.

If possible, enlarge Unit 8 down the hill towards the main road to improve economics.

Response: This portion of ground was not included in Unit 8 due to poor timber quality. The remainder of the unit will remain helicopter unless a roaded option is discovered.

If possible, enlarge Unit 9 to the lower road and try to eliminate the spur road to improve economics and lessen stream crossing impacts from the spur road.

Response: Wildlife concerns preclude moving Unit 9 downhill to the lower road. As a result of these concerns, a spur road is required.

Insure that the reserve tree clumps are designed to allow safe, efficient cable yarding. Design clumps with a tear drop shape with the narrow part uphill and the sides aimed at the landings for uphill yarding and the reverse for downhill yarding.

Response: All care will be taken to insure that the reserve tree clumps are designed to allow safe, efficient cable yarding.

In all units, insure all hazard trees can be cut as required by OSHA and safe work practices.

Response: Any tree identified as a hazard tree (see the Reserve Tree Selection Guidelines publication dated March 1993) during the harvest phase will be dealt with according to the procedures outlined in the above publication.

In Unit 13, try to leave areas of poor quality hemlock and spruce trees for the reserve clumps.

Response: Reserve clumps must meet the following guidelines: "leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging four large trees/acre (20-30" dbh), three snags/acre, and three large, downed trees/acre (20-30" dbh)". During the presale phase, research in the location of these reserve clumps for Unit 13 will be done in

coordination with silviculture and the wildlife representative assigned to the sale. If the poor quality hemlock and spruce meet the criteria, the areas suggested could be incorporated into some of the reserve clumps.

Drop Unit 19 and the accompanying spur road or enlarge the unit for economic improvement.

Response: The decision to drop or retain Unit 19 will be made during the layout and appraisal phase of the process. There does appear to be some flexibility to enlarge the unit slightly. If a change is made to the unit it would be documented through the unit change analysis procedure.

For economic improvement in Unit 20, plan for helicopter yarding of all the volume and drop the spur road.

Response: Further field review of Unit 20 seems to confirm that helicopter yarding may be the most economical choice given the difficult road construction required to access the unit.

Drop Unit 28. This unit contains timber that is too low-value to justify helicopter logging.

Response: Stand exam data for Unit 28 shows that 59 percent of the unit is Alaska yellow cedar. Based on this information, we conclude the unit, though not high in volume/acre, would be economical to harvest by helicopter.

Enlarge Unit 30 for economic improvement, but insure there are adequate anchor stumps on the revised unit boundary.

Response: Adequate anchors are important. Anchors and tailholds are items the presale foresters assess for each unit during layout and adjust the boundary accordingly.

Enlarge Units 31, 32, 34, and 43 up the hill as far as practical for cable logging. This will lower the road amortization for these units and greatly benefit the timber economics.

Response: The upper boundary for Units 31, 32, 34 and 43 are approaching 72 percent slope. These units will be reviewed by a soil scientist during layout and a determination will be made at that time. Costs are evaluated individually and as a whole sale during the appraisal process.

Enlarge Unit 39 to take advantage of the high-value timber in the area.

Response: Field review indicates that the majority of the merchantable timber has been incorporated into Unit 39 as presented in the unit card.

Design Unit 45 for cable logging on the lower slopes and concentrate any needed leave trees in the higher slopes where the helicopter logging will take place.

Response: The unit card for this unit would indicate that your issues have been addressed.

Enlarge Unit 47 if possible.

Response: Site review of this unit indicates there is not much opportunity to enlarge Unit 47.

Enlarge Unit 53 if possible.

Response: Site review of this unit indicates there is not much opportunity to enlarge Unit 53 downhill.

Page 2-17, Discuss why Alternative 2 provides the most cost-effective timber supply. What are the savings?

Response: Please see the Final EIS, Chapter 3, sections Silviculture and Timber Management, and Social and Economic Environment for discussions comparing the economic outlook for the alternatives. As stated in the Silviculture and Timber Management section, "The combination of short-span cable yarding and less helicopter yarding contribute toward Alternative 2 being the most economical on a per-unit harvest basis." See also Table 3-5 for a comparison of harvest acres and volume by yarding type.

Page 2-17, "Component B" paragraph: a brief summary or reference to Chapter 3 discussion of long-term management and deer habitat would be helpful.

Response: The preceding page (2-16) of the Draft EIS does state, "The discussions of effects are summarized from Chapter 3, which should be consulted for a full understanding of these and other environmental consequences." The issue of subsistence (addressed in the Component B paragraph) is discussed or mentioned in several sections of Chapter 3, including:

Appendix B

Social and Economic Environment; Environmental Justice; Heritage Resources; Marine Environment, Log Transfer Sites, and Related Facilities; Recreation; Roadless Area; and Wildlife, as well as Subsistence.

Page 3-15, Why does Alternative 5 not include more of the timber units at AYD 2,200' that the other alternatives use? Excluding the harvest of this timber would seem to increase the cost of helicopter yarding considerably.

Response: The reason that Alternative 5 does not include more timber units at AYDs of 2,200 feet is that there is little suitable timber available at that distance that is not included in beach fringe, which extends inland to 1,000 feet from saltwater. More noteworthy is that Alternative 5 constructs no new roads. Many of the units in the other alternatives are helicopter yarding to new roads. This is the main reason Alternative 5 does not show many units in that yarding distance.

Page 3-18, 4th paragraph: Was an attempt made to control costs with shorter yarding distances for alternatives other than Alternative 2, principally Alternative 5?

Response: Helicopter yarding distances were the limiting factor in unit selection in Alternative 5. Units with yarding distances of more than a mile were kept to a minimum as much as possible to reduce costs.

Page 3-20, Table 3-10: Are employment estimates based on maximum usage or roads for logging on non-Forest Service lands?

Response: In the Draft EIS Table 3-10, Logging-related Employment and Income for each Alternative – Other Landowners, the logging-related employment and income of each alternative for other landowners reflects the minimum amount of road needed to access the timber. Employment figures are generated on the amount volume harvested which includes road constructed.

Page 3-21: It would be very useful to include costs to the government in Table 3-11, by alternative.

Response: Direct project costs to the government are displayed in the Final EIS, Chapter 3, Table 3-17 - Transportation Construction Costs by Action Alternative.

Page 3-61, ROS classification – the roaded acres increase, but from what to what?

Response: A new table (Table 3-31) has been added in this section of the Final EIS to show these changes in ROS Class.

Page 3-66, The National Roadless Area Conservation Rule is not well explained, particularly the parts which discuss Social and Economic Mitigations. Why would Alternative 3 be combined with Selected Social and Economic Mitigations, but other alternatives would not?

Response: Much has changed in the realm of the roadless rule since publication of the Draft EIS. The Final EIS has analyzed the relationship of each alternative to the current status of applicable policy. The Roadless section in Chapter 3 of the Final EIS has had substantial changes after comments to the Draft EIS, to provide a much clearer display of the effects on the roadless character of Gravina Island and the application of the National Roadless Area Conservation Rule. Please refer to Comment Type 1, which provides additional information on roadless analysis.

Page 3-79, 2nd paragraph. Would heavy industrial development be caused or facilitated by Forest Service roads?

Response: It is not anticipated that any additional heavy development would be caused or facilitated by National Forest System roads. The Draft Central Gravina & Airport Reserve plan by the Ketchikan Gateway Borough has additional information about Borough plans for development on Gravina Island.

Page 3-83, Karst, Alternatives 2-4. What are the BMPs you plan to use? What form will your commitment to doing them take?

Response: The Karst section of Chapter 3 in the Final EIS has a new section called "Mitigation". This section contains further disclosure of the Forest Plan Standards and Guidelines and Best Management Practices as they apply to karst. We are required to implement applicable BMPs and our commitment to doing so is strong. The applicable BMPs are listed in the unit and road cards (see Draft EIS Appendix B, and Final EIS Appendix F). The Forest Service is very diligent in its application of these practices for the protection of karst and other resources. For additional discussion on Karst, see Comment Type 25.

Page 3-44: Watershed Assessment Summary: What is the significance of these impacts?

Response: This section has been restructured to be more clear in the Final EIS.

Page 3-45, Explain why “other watersheds” were excluded from a Watershed Assessment analysis.

Response: Additional information has been provided in the Final EIS with the rationale as to why an assessment was not completed on all watersheds. A synopsis of this rationale was that the watersheds had to meet criteria for a Tier I stream survey, streams had to be in at least a 3rd order watershed greater than 1 square mile, and there had to be the presence of anadromous and resident fish within the watershed.

Page 3-51: The discussion of “Other Landowners” paragraph should have been done in the Transportation section.

Response: Portions of this discussion would indeed fit well within the Transportation Section and are moved there in the Final EIS. The portions that apply to stream crossings will remain in the Watershed and Fisheries Section as they have importance to watershed and fisheries impacts.

Page 3-84: Cumulative Impacts paragraph

Response: The cumulative effects analysis is strengthened in the Final EIS. Comment Type 14 also contains information about the analysis of cumulative effects in the Final EIS.

Page 3-85: first paragraph: Section 404, regulates discharges into all waters of the US, including wetlands, not just into wetlands (except, in this case, where the silviculture and other 404(f) exemptions apply).

Response: This language is corrected in the Final EIS.

Page 3-87, Roads on Wetlands, describe the rock overlay construction techniques that maintain wetland function and how they do that.

Response: When roads cannot avoid muskeg habitat, a road construction technique is used that continues to allow the wetland to function through water flow under the road. The road location is does not excavate out muskeg materials. It places larger coarse layer of woody material over top the road location. This organic mat is capped with a rock layer that the vehicles travel on. The coarse vegetative layer allows water flow continuing to allow the wetland to function.

Page 3-88: Cumulative Impacts section: A forecast of future effects is a part of cumulative impacts analysis. It is not clear what your basis for the 50% ratio is. We recommend that you place all wetlands on the Unit Cards so that reviewers can understand where impacts would occur.

Response: The Final EIS contains a strengthened cumulative effects analysis and corrected discrepancies in the road and unit cards. See citation “Patric, J.H. 1966. Rainfall interception by mature coniferous forest on Southeast Alaska. Journal of Soil and Water Conservation 21(6):229-231”. This citation describes the rationale for using the 50 percent ratio. Wetlands were placed on road cards as effects from roads on wetlands are more of a concern rather than on the unit cards. To place all wetlands and riparian areas on one map would clutter the map to the point of making them unreadable. More detailed information on the location of all these resources is located on the GIS coverages of these resources.

Page 3-89, Harvest on Wetlands: This paragraph implies but does not mention increased runoff as timber is harvested from wetlands. Will this cause increased runoff? Where might some of the problem areas be: how long might some of these effects last?

Response: Timber harvest will likely cause an increase in water yield, but at the size of the units and the proximity to streams the amount of measurable increase in yield may be hard to detect. Any increase would diminish quickly (within 5 years) as harvested areas re-vegetate and root systems become established. The potential problem areas from increased water yield would be to drainage structures. But this is unlikely since large culverts and bridges are designed to pass 50 year flood events and smaller culverts are designed to pass 25 year flood events.

Page 3-89: Cumulative impacts are stated here, but again, there is no discussion about whether they are significant and why. The figure given for harvest by other landowners is up to 575 acres, which is not much less than the direct impacts on Forest Service Lands (723 acres). Will this impact exceed thresholds for resources?

Response: The Final EIS contains a strengthened cumulative effects analysis and corrected acreage discrepancies.

Page 3-96: The benefits of thinning last about 10 years. When is thinning normally done: How often will pre-commercial thinning be done in one stand, and will it occur periodically over the course of the rotation?

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Response: For optimal benefits, pre-commercial thinning is scheduled on high-productivity sites when the stand is between 15 and 20 years of age. A secondary commercial thinning is scheduled if needed prior to final harvest. Other stand treatments may also occur for other resource reasons such as for wildlife habitat.

Page 3-97: Scattered throughout Chapter 3 are references to past human impacts on timber resources, including Table 3-34. All these references should be brought together into one section and discussed, so it is clear what past impacts the resource has experienced, and all past causes and effects can be characterized.

Response: We feel it is easier for the reader to track impacts resource by resource as they appear throughout Chapter 3 so the reader can see how each resource is affected. The Draft EIS table, in the Biodiversity and Old Growth section of Chapter 3, quantifies impacts to productive old growth (POG), and high-volume productive old growth. While we recognize that resource impacts are interrelated to varying degrees - for instance, POG is also discussed in the Wildlife section as it relates to deer, wolf, goshawk and marten habitat – in order to best display impacts we have organized our discussion by resource.

Page 3-104: If Bostwick Creek bridge is a potential problem, the Forest Service should either decide to move the bridge and commit to it in the EIS, or commit to any necessary contingencies, associated with impacts to loose-flowered bluegrass.

Response: The bridge location is only an issue if Alternative 2 or 4 is selected in the Record of Decision. Alternatives 3 and 6 do not have this road or bridge location. If Alternative 2 or 4 is selected then the road and bridge location would be moved to avoid loose-flowered bluegrass. (See also in the Final EIS, Chapter 3, section Threatened, Endangered, and Sensitive Species, the paragraph titled Loose-flowered Bluegrass).

Page 3-120: Based on your statements that marten density may be reduced by as much as 90 percent when road densities approach .6 miles per square mile, Alternative 4 is likely to have a significant impact to the species. Is this correct? What is your assessment?

Response: Open road densities do not approach 0.6 miles per square mile under any alternative, so the large (90 percent) reduction would not be anticipated. The marten section of Chapter 3 of the Final EIS displays reductions in marten habitat by VCU. The largest decrease in habitat would occur under Alternative 4. Marten populations would likely show a decline under Alternative 4. No alternative, including 4, would result in road densities greater than 0.6 miles per square mile.

Marten are easily trapped and can be over-harvested, especially where trapping pressure is heavy and not effectively controlled. This corresponds closely to the availability of road access. Because of their susceptibility to trapping, marten densities may decline in areas where road densities exceed 0.2 mile of road per square mile. Marten densities may be reduced by as much as 90 percent when road densities approach 0.6 mile per square mile.

There are currently no open roads on the project area. As presented in the Wildlife section in Chapter 3 of the Final EIS, four of the five action alternatives in the current project propose building roads to harvest timber. Alternatives 2, 3, 4, and 6 propose construction of approximately 17 to 22 miles of new roads resulting in road densities between 0.22 and 0.27 miles per square mile. In Alternatives 2, 3, and 6, all roads would be physically and/or administratively closed after timber harvest. In Alternative 4, the mainline road would remain open after timber harvest. Future road densities on non-National Forest System land associated with the Gravina Access Plan are currently unknown. No marten have been reportedly harvested from Gravina since 1999 (ADF&G, unpub. data).

Appendix C

Subsistence Hearing Transcript

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Appendix C

Subsistence Hearings Transcripts

Introduction

The Forest Service is required to hold subsistence hearings under ANILCA Sec. 810 if it is concluded that the Proposed Action "may impose a "significant possibility of a significant restriction on subsistence resources or uses." Such a finding requires that the Proposed Action 1) be modified to remove the significant restriction, 2) be dropped, or 3) proceed with the stipulation that formal subsistence hearings be held and subsequent findings published.

A "significant restriction on subsistence uses" means the Proposed Action can be expected to result in a substantial reduction in the opportunity to continue subsistence uses of renewable resources. Reductions in the opportunity to continue subsistence uses generally are caused by: reductions in abundance of, or major redistribution of resources; substantial interference with access; or major increases in the use of those resources by non-rural residents.

The analysis for the Gravina Island timber sale project concluded that there is a significant possibility of a significant restriction on subsistence resources or uses, primarily due to the increased access that would result from the proposed road construction. This finding was published in the Draft and Final EIS. See the Subsistence section in Chapter 3 for a discussion of the effects of the project on subsistence resources.

Subsistence Hearings

The Forest Service held subsistence hearings for the Gravina Island Timber Sale in three communities: Metlakatla (February 13, 2001), Saxman (February 26, 2001), and Ketchikan (April 23, 2001). Eight individuals testified at the Metlakatla hearing, 16 individuals testified at the Saxman hearing, and 13 individuals testified at the Ketchikan hearing.

The transcripts for the subsistence hearings for the Gravina Island Timber Sale are published in this appendix, with a list of the individuals who testified (Table C-1).

Table C-1
Subsistence Hearing Sign-in Sheet

Name	Hearing	Page
Tom Lang, Sr.	Metlakatla	C-4-6; C-10; C-15
Larry Shearer	Metlakatla	C-5-7; C-12
Lindarae Shearer	Metlakatla	C-4-7; C-11-15
Casey Nelson, Sr.	Metlakatla	C-7-8; C-11; C-14-15
Barbara Fawcett	Metlakatla	C-9-10
Louie Wagner	Metlakatla	C-10-11
Judy Lauth	Metlakatla	C-10
Patricia Beal	Metlakatla	C-13-14

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Matilda Kushnick	Saxman	C-16-18; C-27
Ginger Fox	Saxman	C-17
Bill Thomas	Saxman	C-16-19; C-21; C-25-26
Patrick Garza	Saxman	C-17-18; C-25
Mike Sallee	Saxman	C-18-19
Elmer Makua	Saxman	C-19-20
James Llanos	Saxman	C-20-21
Richard Shieldss	Saxman	C-21-22; C-27
Winona Wallace	Saxman	C-22
Lee Wallace	Saxman	C-22-23
Nora DeWitt	Saxman	C-23-24
Frank Seludo	Saxman	C-24
Richard Makua	Saxman	C-24-25
Bill Kushnick	Saxman	C-25
Joe Williams	Saxman	C-26-28
Joyce Makua	Saxman	C-27-28
Willie Jackson	Ketchikan	C-29
Mike Sallee	Ketchikan	C-29-31
Holly Churchill	Ketchikan	C-31-32
Elmer Makua	Ketchikan	C-32-33; C-41-42
Norman Arriola	Ketchikan	C-33-34
Rob Sanderson	Ketchikan	C-33-34
George Winter	Ketchikan	C-34
Terri Burr	Ketchikan	C-35-36
Merle Hawkins	Ketchikan	C-36-37
Larry Willard	Ketchikan	C-37-38
Bill Roteeki	Ketchikan	C-38-40
David Jensen	Ketchikan	C-40
Dolores Churchill	Ketchikan	C-40-41

Metlakatla Subsistence Hearing, February 13, 2001, Metlakatla

MR. INGERSOLL: Hi, for the record, I'm Jerry Ingersoll, I'm District Ranger for the Ketchikan-Misty Fiords District of the Tongass National Forest and I'd to welcome folks here to the subsistence hearing related to the Gravina Island Timber Sale proposal.

Thanks for coming, and we certainly apologize for any miscommunication or difficulty in getting the word out and letting people know that this hearing was taking place.

This is one hearing in a process that's been going on for quite some time that's included consultation with the Tribal government here, and has still got more opportunities for public input before a decision is made on what we're going to do on Gravina Island. The team leader for that process is Susan Marthaller, and she's here today and can tell a little bit about the project before we start taking testimony. Susan?

MS. MARTHALLER: The maps that you see up here are the same ones that you see in the document that you have in front of you, and I was just going to use them to explain a little bit about how we got to where we are today. And then what we're here to do today, that is to listen to your comments on these proposals. But if you have any questions before we get to the testimony, we're more than willing to talk with you about those, too.

So, first of all what we do when we're proposing any activity on national forest land, is we have a proposal; either if we're going to have a timber sale on a particular area, or we're going to build a trail, we're going to have a cabin. So the proposal on Gravina Island was to have a timber sale and to build a certain amount of road into that to be able to access the timber. And Alternative 4 was that original proposal, and part of this proposal was to use the LTF that's currently existing over here in Tongass Narrows, the one at Seley's Mill, to tie this road into what ever link there is across to Ketchikan someday, and to keep this an open road system so that people would always be able to access the interior part of Gravina Island.

And the reason for that part of the development outside of the timber sale was because these adjacent landowners over here, and some of the people in the communities of Ketchikan, and Metlakatla, and Saxman, are also interested in having additional access onto Gravina Island. They want to have some kind of development occur over there; they want to see more roads to drive in. There's a certain segment of the population that that's an important thing, and so that's what this original proposal was to do. LTF, in Tongass Narrows, an open road system that would be available for other types of development and then this timber sale proposal of 37 million board feet. And these pink areas are the units that were proposed in this alternative.

Once we had a proposal we went out to the public and we said, here's our proposal, here's what we think are some of the issues that are associated with it, and we came to Metlakatla at that time and we said here's what we propose to do, tell us what your concerns are, help us develop some other alternatives. If you don't like this particular proposal, tell us what problems you would have with this.

And so, with some of that information from Metlakatla and from other groups, too, one of the issues that we heard from people was we need a timber sale that's economically feasible. We need to have something that has a net positive worth to it. So we need -- we need you to show us, what would be the most economical way of having a timber sale on Gravina Island.

So the most economical thing to do, is to bring the wood to the water as quickly as possible, and in this case this is the alternative that built an LTF in Bostwick. It brings a road system down to that LTF and then it helicopter harvests these other areas and that wood goes to barges. But this unit was designed primarily to get the wood to the water as quickly as possible and make it as economically feasible as you possibly could. So that's Alternative 2.

Alternative 3 was one that we developed with a lot of help from some of the Native groups and we call it the wildlife and subsistence alternative. Because with this alternative we were trying to preserve as much of the deer habitat as we could. We were trying to not impact the current subsistence use that was going on there, in Bostwick or inland with deer hunting. And so this alternative designed the same road system as in Alternative 4, where the wood would come out, use the LTF at Seley's Mill, but then after the timber sale was over, this road system would be closed. It wouldn't be accessible anymore. When it comes onto national forest land, there would be a gate, there would be some way of blocking it so that it wouldn't be accessible anymore. And we felt that by doing that, that there wouldn't be the increased hunting pressures that you would have from an open road system. So this alternative harvests 32 -- 32 million board feet I think. So, the volume harvests are pretty comparable between 2, 3 and 4. But the critical factors to remember between those are, in 2 an LTF goes to Bostwick. In 3 and 4 it uses the existing LTF in Tongass Narrows. Four, the road system stays open, in 3 it's closed.

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And then one of the other issues that we were also trying to deal with at the same time was, what if you can't build any new roads there, what if the roadless initiative comes into play before you've made a decision on this and you're not allowed to build any roads, but you are allowed to harvest. What would that look like? And so Alternative 5 builds no new roads, and by doing that, to make it an economically feasible timber sale at the same time, we had to design units that were close to the water. So all the inland types of units that you see in here, all of these ones in here, they were no longer feasible, you couldn't get them to the water. I mean it was too far to fly the wood, to make it economical, so you end up with just these units right close to the water and they would go to a barge in the water, helicopter to the barge. And so with this alternative it was significantly less volume. It went down to 12 million board feet from the original proposal of 37 million board feet.

So five different alternatives, trying to answer a variety of different questions and issues that people had. So, I guess what -- do you have questions about any of those particular alternatives.

MR. LANG: You mentioned a zero, do nothing alternative?

MS. MARTHALLER: Oh, the No Action.

MR. LANG: Yeah. That's an alternative too.

MS. MARTHALLER: That's an alternative - right. You're right. We don't have the map of the No-action Alternative is the existing condition one, and like Tom mentioned, we always look at a No-action Alternative. We're required under law to do the analysis of what would happen if you didn't implement this alternative and that's displayed in that document too. But it would -- it would -- the island would stay, on the national forest part of it anyway, like it currently is, for this decision period. It's not to say that at another time we wouldn't come back and propose another timber sale, but for this decision that would -- that would be what we would choose, could choose.

MR. INGERSOLL: I might just also mention the preferred alternatives. We've identified two of these alternatives as our preferred alternatives at this time. And those two alternatives are Alternatives 3 and 4. Those are the alternatives in which the road system would go to Tongass Narrows and the logs would be taken and put on a barge in Tongass Narrows and there would be no log transfer facility in Bostwick and that -- and that is the two preferred alternatives.

MR. SHEARER: That's 3 and 4?

MS. MARTHALLER: 3 and 4.

MRS. SHEARER: Where is that in here?

MR. SHEARER: I just (saw) it in this letter, and I don't know where it is.

MRS. SHEARER: Is it in here, I mean where is it in here?

MS. MARTHALLER: Tom, can you pick up that mike and move it farther down there?

MR. INGERSOLL: The preferred alternatives are identified, where in the document are the preferred alternatives identified?

FOREST SERVICE MEMBER: In Chapter 2 it talks about all the different alternatives, so it's 16 pages where it is.

MRS. SHEARER: Okay.

MR. INGERSOLL: And Alternatives 3 and 4 are currently the preferred alternatives by the Forest Service.

MR. LANG: Well that's the question I had asked you -- that was printed in the paper, that said they had an alternative and I asked you why are we are doing all this if you already made a decision? If you already have made a decision, you're going to do either 3 or 4, why are we doing this then?

MR. INGERSOLL: I'm sorry, I must have said something wrong there.

MR. LANG: Well, it was just in the paper that.

MS. MARTHALLER: We've talked about that before and.....

MR. LANG: Well yeah, but I never got an answer.

MS. MARTHALLER: Yeah. The words that they used in the paper it wasn't our words, it was the reporter's words. They said that it's -- we selected Alternative 3 and 4.

MR. INGERSOLL: Those words are incorrect. We have not made a decision; we have a draft environmental impact statement here which we are taking comments on. We do not have a decision. A decision would be made sometime after we've taken these comments, after we've published a final environmental impact statement. So the -- yeah -- we haven't made a decision yet. That's why we're here.

MR. LANG: Then in sticking with 3 and 4 building the roads in, one says leave them permanent and the other one says dismantle the roads after you're done. Now I've heard that almost all my life and even on Metlakatla when we done our logging, as soon as the logging is over and dismantle the roads so nobody will driving in and out of there. It never happens, they're always using logging roads for extensive hunting and everything. They say they're going to do it, but they never do it.

And this is one of the prime issues of the people that knowing, they're going to log anyway, but they're going to ruin it with the roads. Saying, hey, let's take the roads back out if you're going to put them in. Or make them -- not putting a gate there, a gate doesn't do anything. Dismantle them, take the bridges off and things like that. It didn't happen here. And we decimated our little island within a couple of years, with super hunters on four wheelers and Gravina's even smaller, and a lot of our people do hunt in there. My children -- boys, hunt on there all the time. I have three sons that make a living off hunting off there, for their families still, and the road would be right where they hunt. So, that's why my opposition is to -- if you're going to log, which I think you're going to do anyway, is to get the roads back out. The roads are the killers, not so much as the controlled logging, with the practices you have today are fairly good. A lot better than they used to be. Stay away from the streams and things like that.

But the road would be -- even though Ketchikan looks at it as a recreational area, to us it's a subsistence area, it's not a place we go to have fun, it's a place to get something to eat. That's the difference and a road would kill the subsistence. Thank you.

MRS. SHEARER: Just out of curiosity, I was just wondering, are there -- what logging companies are pushing for the sale, do you know? I mean.

MR. INGERSOLL: When we sell timber, we sell timber on a competitive bid.....

MRS. SHEARER: Uh-huh.

MR. INGERSOLL:for domestic manufacture, meaning that the wood has to be -- has to go through a saw mill in Alaska.

MRS. SHEARER: Uh-huh.

MR. INGERSOLL: So, the Forest Service manages lands for a variety of different uses, including some lands that we manage for production of wood. To provide jobs and economic opportunities for folks in Southeast Alaska. If we decide to do a timber sale here, that timber sale would be sold competitively to the highest bidder.

MRS. SHEARER: Uh-huh. So first comes the decision by the Forest Service that this is needed for economic reasons, and is that your primary consideration in having a timber sale. Or are there -- you have a backlog of so many millions of board feet that you have to get rid of or offer up for sale. How do you come to this decision just -- just for my own information?

MR. INGERSOLL: There's no backlog, no requirement there, the -- we do manage the national forest, in part to provide timber for companies to bid on and the primary reason for selling timber in Southeast Alaska is to provide economic opportunities, because the timber industry is an important part of the economy in Southeast Alaska. So, in fact in Metlakatla, of course, with the closure of the mill, there's been a great deal of discussion and debate about we should provide more timber. So, the reason for selling timber is to provide those jobs and it's done on a competitive basis. Did that answer the question for you?

MRS. SHEARER: Well, not really. Actually I want to know who is the person or who are the people who asked you to offer this timber for sale. Is it the Senator, Senator Stevens, is it the MIC government. Is it President Bush's administration or -- who makes the decision?

MR. INGERSOLL: Oh, we have a forest plan, which governs how we manage the forest.

MRS. SHEARER: Yeah.

MR. INGERSOLL: And it sets part of the forest as, the objective of this part of the forest is to manage it for timber production. So we initiate the timber sales.

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MRS. SHEARER: Okay.

MR. INGERSOLL: However, some of the folks who are supported by that and who believe in that, certainly the Alaska Forest Association which is a collection of manufacturers, supports timber harvest. Locally Gateway Forest Products, Pacific Log and Lumber, Viking Lumber, Silver Bay Logging are the primary local manufacturers that typically bid on our timber sales. All of them obviously are interested in purchasing timber. In the past Metlakatla Forest Products has also purchased timber from us through the bidding process.

MR. LANG: I think what she was kind of building up to and never got quite to was why Gravina Island. This was the very first question I ever asked, when I very first met every one of you on the very first meeting. Why Gravina Island, why not somewhere else and in the latest printout I got, I got a copy that the mayor had of your thick book. There is a little chapter dedicated to why not log somewhere else, why Gravina Island and when I read the whole thing -- I read it three times, and there was only one word that I could find that you could use.

And it was -- well there was several -- it's a lot of words you used, but it was inconvenient for you to change at this time, since it was already part of your plan. Inconvenient was the only word I could find in that chapter of why you do not take logs from somewhere else, other than Gravina Island, since you're dedicated by the law to provide so many timber -- so much timber for private use a year why not take it from somewhere else?

MR. INGERSOLL: Well, of course one answer is we do take it from some place else.

MR. LANG: Well in this case we're only talking Gravina, we're not talking the whole issue, how did it boil down to Gravina, because she was asking general question, I'm asking the very question we're here to face, Gravina Island.

MR. INGERSOLL: Uh-huh. We cut timber across a large of part of the Tongass National Forest, so it's not just Gravina, and if you -- we're trying to provide a certain level of timber supply to support the industries in Southeast Alaska, from a certain land base. An area of land that's available, because a lot of Tongass National Forest is set aside and not available for timber. We've been every place else. We've cut timber from all of the other areas on this district that are available for logging and we have to get -- cut a substantial volume of timber from Gravina Island.

If you're looking at -- if you want to produce that much timber from that land base you have to cut it from all of the places that are available. Now, not all of Gravina is managed for timber production. Parts of it are set aside for old-growth habitat, parts of it are set aside for other purposes. But part of the Gravina Island is designated for timber production.

MR. SHEARER: That's only because part of it has timber on it. That's the only reason. It's not very big, and there's not very much timber. Well, excuse me. I'm sorry. I was just looking at the maps here and I can't help but see, what looks to me like the obvious reason Gravina is targeted here, it's so close to all our manufacturers right now and with the shutting down of the whole industry everywhere in the Tongass. The most affordable place to log right now, would be right next to our mills, you know, wouldn't that make sense to you? Wouldn't that be more attractive to the people who own the mills over there in Ketchikan and here, and the loggers who mobilize, they don't have very far to go, it's right there, you know.

MR. INGERSOLL: It certainly makes it an attractive sale, now. In fact....

MR. LANG: Uh-huh.

MR. INGERSOLL:we are harvesting in other places too that are much farther away from the mills and it's not just here.

MR. LANG: But this -- the reason why it's so interesting -- of much concern to us, is because, like you and I were talking earlier, you know. Being Native I grew up in this whole area here, I was raised in this whole area, I've learned how to hunt and fish in this area. And it concerns me that Bostwick Inlet is identified as a log transfer facility area. That's a major salmon stream there, you know, and it's a major shellfish area. And it's a major hunting area. And there ain't a hell of a lot -- you put a couple of roads in there, even one road, and it would decimate the whole area.

It's a known fact that log transfer facilities in that area, that has all this abundance of sea life and everything will die off from just the fact that it's a log transfer facility. We've got one there in Hemlock, there used to be one of our major crab production areas and salmon. It has yet to bounce back, and it's been years and years since we've had any logging over there, we still don't have any crabs there.

And yeah, I used to camp there. We used to -- you know, depending on the seasons and what particular fishery it was we were targeting at the time, our people would camp in different parts of Southeast Alaska here, you know, whether it be for halibut, or king salmon, or dog salmon, or humpies, or whatever. You know, and that's an important crab and shellfish area

for not just us, but the people of Saxman and Ketchikan, you know.

MS. MARTHALLER: For the -- excuse me, for sake of the court reporter, could you state your name when you begin talking so that she can link that with the sheet in the back there.

MRS. SHEARER: You want me to say my name?

THE REPORTER: Yes.

MRS. SHEARER: Okay, my name is Linda Rae Shearer, and I just wanted to make another point, or come to the point that I was coming to actually by asking these questions, and that is that it looks to me that this timber sale, would be -- is actually being driven by economic considerations that would be more beneficial to the companies that would profit from such a sale than to anyone else, and therefore I could only conclude that, you know -- well like I said, you know, that the people that would benefit the most would be the companies who would -- who, you know, obviously are in business to make a profit. And that's their bottom line, is profit and -- but they could seriously and permanently damage the forest.

And Gravina is a small island. By opening it up for a timber sale and making some roads, you say you could take these roads out, still would severely adversely impact the environment there. I don't see how it can fail to adversely impact it, I mean even if you have say -- like he said, one of the alternatives was to transfer the logs from the road to the -- to barges. Well just the increased traffic in the water, even if a log never touched the water, just the increased traffic in the water will make things -- will upset the ecosystem, it -- you can't help it, you know, nobody can tell me that it's not going to impact the environment - it's going to.

And I think that you guys have to balance -- it seems to me -- I mean I'm not telling you what to do, or how to think, or anything, but it seems to me like you would have to balance a short-term economic benefit to for-profit businesses against the destruction, potential destruction, of a beautiful, mostly pristine environment now, that provides subsistence for a lot of families. I know those families aren't here to speak for themselves, but that's because they didn't know about it, you know, and those of us who can speak up are speaking up now. But it seems to me that you have to weigh the economic benefits against a preservation of environment, non-disturbance of the ecosystem and subsistence for people like us who love cockles. And well, that's what I just wanted to say about that, more about subsistence later.

MR. NELSON: Are you done, Linda? Are you done?

MRS. SHEARER: For now, yeah.

MR. NELSON: Good afternoon, my name is Casey Nelson, Sr. I'm the chief magistrate here in Metlakatla. Before I testify, how I feel about the logging of -- on Gravina Island I have a couple of questions. Does Saxman, the City of Saxman, or the Cape Fox Corporation have any holdings on Gravina Island on the southeast side that you're going to log? They have no longer have any holdings in Bostwick Inlet?

MS. MARTHALLER: No.

MR. NELSON: What's Ketchikan's interest, the City of Ketchikan's interest in this proposed logging project, and before you answer let me give you just a brief explanation of why I ask this question. Is it for the purpose of making preparations for Ketchikan to eventually annex all of that area to expand. You know, this discussion has been kicked around for some time by a number (of) people, including me, you know, and I'm concerned that, you know, one of the main reasons for pushing the logging on Gravina is to kind of put a puzzle together. So I guess I better stop and ask, or hear your response to my question on what's in it for the City of Ketchikan, or is there anything in it down the road.

MR. INGERSOLL: The City of Ketchikan hasn't taken a position as far as I know, on this project or the timber sale. Ketchikan Gateway Borough has, and the Ketchikan Gateway Borough is strongly in support of timber harvests that would provide economic development, jobs for folks in the timber industry.

Ketchikan Gateway Borough has also, I believe, a position on this sale that they would like an alternative that had a road that was open that would provide recreational access for folks from Ketchikan. The Borough is also a fairly major landowner and land manager. If you look at the map behind you, the gray areas on the map are not National Forest System land. They are held by others; some of those gray areas are held by the State of Alaska through the Department of Natural Resources, some through the University Land Trust and some through the airport reserve.

But the Ketchikan Gateway Borough is another major landowner there and they're interested in developing their land for economic use.

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MS. MARTHALLER: And I can respond to what some of the other landowners have told us. We've worked in conjunction with the State of Alaska on University land and State forestry land and also with the Trust lands. And we know that because -- because there's not currently any road systems in place, that it would be not as economically feasible for them to log their lands, unless there was a road system into that.

So we know that part of our project -- part of them being able to log in the near future is this road system that would come in from the Ketchikan side. And we know that, you know, in spite of us -- whether we do that or not, those landowners are looking at development and they're looking at development seriously.

You know, if we were to do something it would make it easier for them, if we don't they'd probably still go forward with things. It would probably just be at a slower rate.

MR. NELSON: And that's what I'm afraid of, I think one of the -- one of the items that -- you may have discussed it prior to my getting here, is tourism. You know, all of the ships, are -- the majority of the ships come through the channel here and before going any further, first I guess I'd better let you know that I'm not opposed to logging. Absolutely not, I'm not opposed to logging. I understand the need, you know, for logging and for jobs and so on.

What I'm opposed to is logging that area on Gravina Island. If you log that place out, you could imagine what we're going to be hearing from the tourists when they see that whole shore. You know, my understanding is that we're going to be logging from the Seal Bay area, almost into Blank Inlet. Now, that's quite an area, and it's not going to be a pretty sight, especially for the tourism industry. You know, it's really not going to be a pretty sight.

And now I want to get at how I feel that this project is going to affect me and my people here in Metlakatla, if it does take place, and I hope it doesn't. I've used Gravina Island for some 50 years. I've hunted over there, I still do, I fish over there, we get shellfish from there, crabs, we get cockles from over there, we have clams from over there, we hunt deer. I've hunted birds over there. It's an important area for our way of life, you know. Our way of life is somewhat different than the non-Indian people, you know. we -- we live partially and eat partially the western style that most Americans do, but we also have a tradition of our -- you know, of our old power. Harvesting our food and being sure that that material is available there for us the year around. I have some deep concerns about the environment that will take place there.

No matter what anybody says, there's going to be some effect, there's going to be some major effects on us here, on me and my people, you know. Because a good number of our people, almost everybody that has boats here, go over to Gravina, you know, and it's been over 100 years since we've used that area, and I don't want to see it destroyed, because there's a good possibility that it will be destroyed and it can be. You know the handwriting's on the wall. You know logging that area is just the beginning of the end for us as I see it.

You know the effects and the spinoffs from logging that area is going to affect me and my people drastically - we solely depend on that area, we use that area, our people use it. I've seen the Saxman people that use it, it's sad for me to say, that, you know, I've made some inquiries about where Saxman stands on this issue and Saxman seemed to be standing outside looking in and not making any real effort to find out how it's going to affect them, because they use that area too, many of my friends from Saxman. You know, I used to live down the street from them in Ketchikan, I have a home over there, and I know all of my friends that use Gravina Island. You know, and it's not only that southeast side, we use the back side, we sport fish, and we troll and we hunt around on the back side and, you know, it's an area that is of deep concern for me, you know, that there's going to be logging there. Like I said I'm not opposed to logging. I understand the need, you know, to make timber available to the processors, you know, in the end which helps the economy. Well that's great. But it seems to me that, you know, there must be other areas in similar size that may be available. You may not get the economic -- same economic result in other areas that you would get out of this area, you know, I'm sure that, you know, looking at where you're going to log, and the least amount of cost of getting the material out of the woods and putting it up for bid or rafting them is going to be a lot less than any place else because you're going to have towing charges, you know, towing rafts and stuff if you moved a little further away. You know, I don't think that should be a deciding factor because the cost of harvesting and moving the material, it shouldn't be a number one concern as opposed to what logging will do on Gravina Island. I strongly oppose logging that area, I just -- it's very bothersome for me, I'm 72 years old, you know, and I expect to live a couple of more years and I expect to be able to use Gravina. I expect my grandchildren to be able to use Gravina Island area as I've had the privilege to use it. You know, when I'm long gone, you know, I have grandchildren and great grandchildren, I have 36 of them, you know, and I think I have something to worry about, you know, and I want to hopefully be able to get my concerns across to you about logging Gravina, that I'm opposed to it. I don't think it's the right thing to do, I don't think it's the right area to do it. I believe the cost to us is going to be tremendous. It's going to be devastating. Where else do we go, those of us who have 16 -- 15 and 16 foot boats, where else do we go to harvest crabs and go hunting and

most of all our salmon streams?

Bostwick Inlet is a -- there's a large salmon stream. I've gone over there and I've seen thousands and thousands and thousands of fish there, you know, and over the years I've seen quite a decrease. I can imagine what would happen if we interfere any more than what is always there with our salmon.

You know, I think it's one of the -- that's one of the considerations that I would like for you to really look at also, we use salmon from that stream. You know, I had -- many of our people who have passed away now, they had cabins over there where they dried fish, you know, and prepared them for the winter, or have stayed there for months. And prepared seafood, so that they could survive in the wintertime. You look at the economy in this community, our unemployment rate is around 70 percent, probably higher; we depend on living off the land. And I ask you folks to take that into serious consideration and hear our concerns and hopefully that you will respond positively to them. Thank you.

MS. FAWCETT: My name is Barbara Fawcett.

THE REPORTER: If I could get you to just bring that mike a little closer.

MS. FAWCETT: You got my name?

THE REPORTER: Yes.

MS. FAWCETT: I don't think I could say anything any different than what's been said, but I'm going to say it anyway, because this is a big concern and I don't think I could say this only for myself either. There are a lot of people that would be here if they knew about this meeting. I had just heard about it not too long ago. I'm surprised that this has even come up again. We've gone over this so many times. We've met with you before; we've put these same concerns on paper. I didn't even think this would even come up again. I feel kind of bad about it.

When our mills were closed, I think my first my reaction as well as everyone else, was to -- I was angry, I was really angry, because it just took away so much employment, you know, from our people. And what we were told was that there were no more -- there were no more logs.

The people who were running the mill we leased -- we leased the building down there, the mill, the people told us that there were no more logs and they could not afford, you know, to try and keep that mill. They gave us all kinds of wonderful reasons, but these very same people are still trying to do business in Ketchikan and I just don't think their reasons were correct, there's something that's not being spoken about there. I have to agree, like what Casey said, I don't oppose logging or anything, but gosh, when our mills were shut down, it took away, I can't even just tell you how much, you know, of employment. It did bring change, it's not that changes are coming, the changes did come, a lot of people had to leave, they couldn't live here anymore. There was no way for them to earn a living and right now everyone's just scratching around trying to do what they can. And that's still not enough because the mill had been such a mainstay for employment, not to mention the fishery.

The impact, I don't think I can -- I need to repeat, I'm another one of the members who grew up around Gravina. My dad had a cabin out there, and we'd get out of school in May and we'd go and move around the island, you know, according to the fish and all of the food that we would harvest. We'd be gone all summer, living in the camps, living in these cabins, fishing and putting up everything for our winter supply, and that hasn't changed very much.

We don't camp and live out there with our kids any more like we used to, we could -- we would if we could, but it's not possible now. But we still do go out there and we still try to harvest. You know, in many ways, and there's even things my mom taught me, about roots of some of the little growth out there that we don't find over here, that we use for medicinal purposes, there's a lot of things that we use and that's part of our home and I don't know if you had this room full of people, we'd all be saying the same things over and over again. It's our food, it's our mainstay, it's our livelihood. You know it's not just food it's a -- well it is. It is food, and it is our health and it's our state of mind, it's the way we've grown and it's the way we've taught our children. Now every one of us, we have children and grandchildren that we're passing all these things on. We're teaching them all these things and we teach them not only about harvesting and about the land and the waters, we teach them the folklore, you know, and it includes all of that area that you're talking about and I'm asking the same thing that I've heard up and down this table - why just Gravina.

I heard so much when the President signed that there wouldn't be this logging, and it just felt like we were sentenced to death, you know, like there was just absolutely nothing. But apparently that's not the way it is, maybe I misunderstood it, there still is logging, and that was another thing we were told, there's going to be some logs, but it just seems like right now

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we're being told, the only way to save logging is to log Gravina, you know, and it just not good enough, not good enough for us.

I hope I could make myself clear. I mean, I have so many thoughts in my mind, you know, so many feelings about this and it's -- a lot of it is memories and part of the way I've grown and the way I'm teaching my children and the way we all live here, and a lot of it is what we want to continue to have, and we just ask for respect for that.

MR. LANG: Tom Lang, Sr. again. I asked some questions earlier. I didn't make a statement on what I believe, and Mr. Dennis Dunne, who we all should know very well by now, couldn't be present today - he's up in Wrangell visiting his sister - asked me what my opinion was, and I was for zero logging. I guess you've known that from the start, and he said would you please tell them that I am too. So I want to get that in the record, that both me and Dennis Dunne are against -- we're for the first option which is zero logging, which is zero logging. Thank you.

MR. WAGNER: My name is Louie Wagner, are you going.....

MS. LAUTH: Yeah.

MR. WAGNER: Go ahead.

MS. LAUTH: My name is Judy Lauth, I'm executive secretary here for the Tribal Council, but I'm also a subsistence user, a strong subsistence user, and I am opposed to the Gravina logging - extremely opposed. And the reason why I am opposed to it is, you could come to our island, our island looks beautiful, but our beaches, where we have logged, and where we have built our runway, and where we have done other growth, our beaches aren't healthy anymore, our streams aren't healthy, and I'd hate to see that happen to Gravina, I really truly do. It's a beautiful place. I've been there, we have Mother's Day over there every year. It's where we celebrate Mother's Day, because it's a new beginning and mothers always bring new life. But you could see -- you know, I love my island, but our subsistence here has been cut back so vastly that it's hard to go down to the beach and get healthy coekles and clams. You know, and get crabs, and we have certain areas that we can't go into now, but it's getting clean thanks to, you know, the clean up project, but I'd hate to see that happen to Gravina, whether it's -- you know, I know it's -- you're calling selective logging. I know it's selective logging, helicopter logging, whatever you call it, you know, it's -- no matter what kind of logging you do, there's always going to be some kind of damage. You know, even if it's minimal. There will be damage and I hate to see any kind.

Nature -- you know, this is one of the most beautiful places, and we are the gateway to Alaska, you know, we've (inherited) through for tourism, but myself, as a subsistence user, please hear my voice, I would like be noted that I'd hate to see that happen. Thank you.

MR. WAGNER: My name is Louie Wagner. I'm for that proposition number one, for no action at all on here. I feel that Mr. Nelson here spoke for a lot of us very well on all the issues and our concerns. And that's just -- I don't oppose logging, but this area is so important to all of us and I don't know where we would go for subsistence, a lot of it what we get from Gravina, because you take Prince of Wales, it's all been logged off. You go up West Behm Canal, since the pulp mill is closed there's been more logging in Behm Canal since the pulp mill's closed and they couldn't get timber and the road will eventually connect from Ketchikan all the way up, I know, to Shrimp Bay and they've -- you're logging a lot off of Hassler Island there, up that -- I spend most of the year up through the area there and it's a good thing the rest of the people can't see the bareness of the forest.

And I have a four-wheeler, I hunt all the available roads and once the roads are in, to hunt the deer is wiped out within 3 years, it gets very hard to get a deer. The bears move in and the wolves move in - that's all you see on the roads is the -- what's left of the deer that the bear -- that wolves and the bears have gotten. So that area is not good for subsistence and you go up -- you know, there's nothing left in George Inlet, Carroll Inlet, and Thorne Arm, that's all been logged with roads.

This is one of the few places that hasn't been touched and has -- about the only place that has any amount of deer anymore is Gravina and it's because the trees are there for them to hide and nobody can get access with the easy four-wheelers, you've got to hike into get them, and it's just such an important area and it always has been through history for the usage of it. Like I was telling Terry earlier, that our people had cabins all out around Dall Head and on down toward Nelson Cove there, where they had the fish camps in the spring and pick seaweed in the spring, it's just a -- you know, it will be pretty devastating where we won't have access to the subsistence on it.

And every time I read the paper, Metlakatla isn't included in subsistence. It's -- I see everyone else's name in there, but Metlakatla's name's not included, and I've been asking why and one of the answers I was told is because we're a reservation, that we have a 3,000 foot limit, but that's not to just keep us on the island here, we use everything around us, we use this, we

use Duke Island, we use Percy Islands, and we even use out like Cape Chacon for seaweed areas there too, so we use a wide area and we used to go down -- even down to Kah Shakes down there for fish eggs in the spring because that was the first fish egg spawn, herring spawn down there were you can get subsistence. And now that is not there no more.

It's pretty important and I think the Forest Service is going to have to -- or at least really give it a lot of consideration, how it's going to affect not just us but everyone. Like Larry here was saying there on the crab, the bark is going to fall off the barges here and there, and that bark smothers the ground and it just kills the crab right off quickly. And that's my feelings on it. Thank you.

MR. NELSON: I'm Casey Nelson again. I've got a couple of more comments, just a for example, during the height of our logging on Annette Island on the east side there, we had a logging plan, we hired professional people to map this all out for us, we met with the contractor, we agreed on everything. We had foresters out there on the job, to see to it, supposedly, that they comply with the plan, and one day we had a rude awakening. The contractor, somebody supposedly didn't tell the fallers, don't go in this area, you know, they wiped out all of the prime trees along a major stream, you know, and it was devastating. You know, that stream is devastated right now, even though the contractor said okay, we're going to give you guys -- we're going to spend \$300,000 to repair that area. You know, I don't know that they spent that much there, but what could they do. You know, they cut all of the watershed, you know, they cut all of the trees along the stream that -- simple, you know, it happened that quick, you know, by the time it got to us it was too late. The damage is already done.

You know, I get really concerned about these kinds of things. My real concern is our subsistence issue. You know, if you look at our ooligan fishery today, even though this may be a little bit different subject but it's related to subsistence. My people -- my people use the ooligan fishery as a subsistence fishery. Today it's become a commercial fishery that has closed us out. You know it froze us out from the use of that. You know, we haven't been able to get any ooligans anymore, and we're not going to get any.

We're slowly being eaten away, you know, in the different areas. I dread the thought of living long enough to see that we lose all of our subsistence rights, you know. And we need to do everything we can to protect that, you know. The -- I guess my last comment to you would be that I ask you to hear our comments, and consider them, please. I ask you not to let it fall on deaf ears. I expect you to take our comments and our concerns seriously, because they are serious to us. And like I said we're not opposed to logging, you know, we understand that there's an economic benefit here.

But, you know, is it worth it? You know, is that short-term economic benefit worth a long-term struggle for our Indian people? You know, I would ask you to take that into serious consideration and I ask you that you not recommend logging that area.

And I appreciate you folks coming over here and taking the time and hearing our concerns and it's our hope that you will hear them and you will seriously consider that. Thank you.

MRS. SHEARER: Okay. I'm Linda Rae Shearer again, and I didn't make my position statement on subsistence before, but I would like to make it now. Do you want to hand me that? Okay. My position on subsistence includes the following points and if I don't include them it doesn't mean I don't -- you know, that they don't exist in my mind.

But I'm going to try to say everything that I can think of right now, on such short notice. One of the points I'd like to make, is that -- it's the same thing that Louie said, and that is that, well, people on the outside might rightfully ask why can't we just subsist on our -- from our own island and the answer is, there is not enough food to provide subsistence for all of our people. We have grown from probably, when I was a teenager, maybe 800 people when my family -- excuse me, left here and moved to Seattle, and now it's, I believe, over 2,000 isn't it?

MR. NELSON: Yes it is.

MRS. SHEARER: Over 2,000 people so, this is why we need a larger area and like Louie said the 3,000-foot, 3,000 feet, 3,000 yards?

MR. WAGNER: Off the island you talking about?

MRS. SHEARER: Yeah. That boundary is not to restrict us from going elsewhere, we feel that we have -- I believe that we have traditional user rights, maybe not in the sense that you know -- that you interpret the words rights, but we feel that we have those rights, you know, just from traditionally using the area for so many decades and even centuries, well our people haven't been here for centuries, but -- in our particular group - but a least for over -- a little over 100 years, we've had those rights and in subsisting using the food that's available to us. And some of the foods that we get over there, we cannot get

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here any longer.

Or maybe we never could and we to, you know, have a larger area to support a larger amount of people.

My husband Larry and I are nearly 100 percent -- have a nearly 100 percent subsistence lifestyle, we eat very little of what you'd call American food. We don't eat hamburgers, we don't eat steaks, you know, or anything like that. We eat our own food, the food that has been traditional to our people for centuries, upon centuries, even when we lived in -- before we came here. We ate cockles, we ate clams, we ate deer meat once in a while, you know, when it was available, and all of these foods we use, and if we didn't have these foods to use, we don't know what we would eat. What would we eat, you know, and a lot of this food is gotten from Bostwick Inlet and elsewhere on Gravina Island.

We choose this lifestyle because we are very well aware that it's a healthier lifestyle and we know that we're not alone in this thinking, we know that a lot of other people are starting to see that American food is not good for you, and very high fat food, and that food containing omega three fatty acids are much better for you, are much healthy for you and so this is the reason that we have chosen this. Not only that, the fact that it's healthier, but also the fact that this is the way our people have lived for years and years.

And every month on the big tides -- every single month without fail, my husband goes out to gather cockles, crab, clams, octopus, abalone and these are -- these are components of our diet which is good for us. And he brings this home and then we prepare it and we freeze and then we eat that. That is our food, that's all we eat, we do not eat anything else, except for fish, which we get in the summertime and we put that up, you know, and put it into jars and that's how we live.

Even though there's a small amount of people here, there's just a half a dozen of us, you know, stating our feelings, we feel -- I feel that this could very well translate into six or seven -- for every one of us there might be six or seven other people who feel exactly the same way, and we feel, as you can see, very strongly about this area. We just feel -- I feel it's too small of an area, for you to even bother about. You know, why don't you just go somewhere else and select some other timber, you know.

It's so -- it provides such a richness in a food supply for our people, such a rich source that if it was gone, it would be devastating to us. It would be devastating, you know, and I do not exaggerate when I say that, because our freezers are full of food that will support us for the remainder of the year until the salmon comes. So if you take away our subsistence lifestyle by logging on Gravina, you know, where are we going to get our food? Where are we going to get our subsistence food from? We can't get it all from here and we can't afford to go over to Prince of Wales, or to the outside, to the oceans, you know, and get our foods there, but we can get it from here. And so that's my position on subsistence.

MR. SHEARER: Yes, I'm Larry Shearer, you just heard my wife, expounding on her views, and I readily support everything she just said. And, like I said earlier, and I failed to identify myself, I'm sorry for that, I can't help but look at the map here and see that if it's central to this part of Southeast Alaska, it's a population center for southern Southeast. And looking at Ketchikan, Gravina, Annette Island area, I can see how important this timber sale is, you know, to us, the Natives. People with a subsistence lifestyle. And what would take 5 to 10 years of getting this timber out would devastate our subsistence lifestyle, particularly if Bostwick Inlet was utilized, you know. Sure, we've had assurances from the forester over there, that you could take everything north, and that'd be fine I suppose. But I've got 42 years in the construction industry, you know, and I've been into logging and built logging roads and these logging facilities that you're talking about here so I know what it's all about. And, you know, you've got all these great big machines that handle logs and build the roads and everything and in a perfect world, you know, no equipment will leak oil on the ground. Right? Yeah.

But at a log transfer facility site that's kind of the terminus of everything. So all this broken down equipment hauling all this beautiful wood down there, stops right there and all that oil leaks onto the ground and everything and it gets mixed up and turned over and pushed here and there and pretty soon it's all in the water and it suffocates everything down in the bottom of the beach, you know, under water, suffocates everything, we lose Bostwick, you know, we wouldn't get clams, or cockles, or crabs anymore. It would be several generations before it would probably regenerate enough to support another subsistence lifestyle. You know, I will probably have been dead for 50, 60 years before anybody in my family can come back and harvest the crab or a cockle out of there. To me it's just not worth it, you know, it's just not worth it. We, Natives here and other people, the white people who subsist, not all can afford to go out to Prince of Wales, Cape Chacon anymore, you know, you got little skiffs, I mean it's all like that -- Bostwick Inlet is so handy to the area here, you know, we lose that, we've lost a big part of our life.

I'm looking at Ketchikan right there and I see a lot of those places there that before Ketchikan became Ketchikan a lot of that was subsistence. Ketchikan Creek was a major subsistence area, you know, Ward Cove same way, you know, and it's all

gone now. You know, this is the same as blacktopping the Imperial Valley in California, the bread basket of the world, you know, it's happening down there, this is the same thing. I say, no. Please don't log Gravina Island. Please. Thank you.

MS. MARTHALLER: Did you want to make a statement?

MS. BEAL: Yes. My name is Patricia Beal. I've lived here all my life and brought my family up here, my children, taught them to forage off the land, where every one of them can go down and go to the beaches and go to the forest and hunt and I won't have to worry that they would ever starve in this place. And doing this logging in the Gravina area would cause them not to have a place to go. My youngest son is 21 and he's been out hunting since he could hold a gun. And his dad had taught him to learn to hunt for deer, and he does that and he also fishes. Fishing is his livelihood; he's 21 years old. He's owned his own boat since he was 16 and fishing is a great part of his life. He chose this over going to school and chose this lifestyle because he likes it. He's been brought up in it and Gravina is a one-day trip to go hunting, to go crabbing, look for cockles and clams and then you're back home safe. If we have to go out any further, it's going to cost us more than a day's trip, to travel all the way down, 40 miles to Cape Chacon is a long way and it's more than a day to go down and back if we're in a smaller boat, and you'd have to overnight, you'd have to have a boat to stay overnight in, which most of us don't have. And in these other areas provisions for staying overnight on the beach are not available unless we rent a forestry systems cabin, which to me are very -- you know, they're not very close to where we would forage for food. Most of them are up in the lake areas, away from the beach areas where we would be foraging food.

I know this -- like this winter, my son had gone out and they had rented a cabin because they wanted to see what other places that they can go to and to look for another place to hunt. Because there are a lot of people out hunting in the winter and a lot of people depend on our natural foods.

I'm another person that does not eat any other meat other than wild game. I don't trust the meats in the market. And living in this lifestyle has -- it's better for your body, it's better for anybody to live in a lifestyle where your food is grown naturally, where you can get crabs that aren't enhanced with anything from the stores or the markets. To get cockles and clams that we're used to eating and your children have been brought up on this. And like I'm saying to you it's just a day away and we're back, you know, by evening time and we're safe. We don't have to travel on the open waters to get down to Cape Chacon.

And the other thing is traditional medicines are foraged off of lands. And these traditional medicines some of us use them, daily, some of us use it when there's ailments in your families and I for one am teaching my grandchildren now to do -- to make these medicines, and so that they know that they are available to them. And this is one way they can learn to help preserve their bodies in a natural way, and be treating their ailments in a natural way and not having to depend on going to a doctor, not having to depend on a pharmacist, or over the counter drugs, and these are the things that I do. And the other thing that I would speak to is, keeping the cultural aspects of our traditions alive. This means a lot to me, because I work very close with it, not only through our dancing, but also with preservation of our foods, and preservation of our foods is a great part of our tradition.

If our grandparents and great-grandparents and the people before us did not teach us, we wouldn't know and we wouldn't be here today asking you not to log this area. This area and the whole Southeast Alaska has been, it's part of the Pacific Northwest culture of the Indians of the Pacific Northwest which Tsimshian plays a great part, all the way through British Columbia and to here and our people went as far north as Wrangell and Yakutat. In those areas we can find proof that our people have been there, and not just to go there and go on a vacation and see what it's like. But they foraged off these lands for years, for tens of thousands of years, we foraged off these lands, and that these little parts are being taken away little by little we aren't going to have anything left. We're going to have concrete everywhere, and asphalt everywhere and everywhere you put a logging road there's always another highway going in. And that has been shown throughout the whole United States, starting from one coast to the other, to where Washington and Oregon can't go out and fish and go on the beach and forage off the beach for their clams and cockles and crabs anymore. It's devastating to see my in-laws, they can't go to the beaches to do these. And if they do they're allowed only six pieces of clams, six little clams to take home, and that's not enough to feed a family. That's what we're looking at if this happens to us. We're looking at a limited amount. Just like limited entry on fishing now. We're going to be looking at limited amounts of seafood that we're going to have to eat. Our whole diets are going to be changing. When you change a person's diet from their lifestyle if that they've been in, it's devastating to your body. Your body changes with over the years, and then this is passed down to generations and if my children quit eating seafood now and they teach their children not to eat it, their children are going to be in worse condition than they are. And then the great-grandchildren would be the same way.

If you look at history and you look at the medical history it's proven that when you change -- a drastic change in your diet,

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causes a lot -- a lot of change in your body that's not normal and these are the things that concern me.

And then I'd always go back to, you know, the length of travel going away from here, I say -- this is the third time I'm saying it because I really want to make the impression that we don't need to be traveling so far away to get our own foods. We don't need to be putting our life at risk on the high seas to look for our foods that we -- that we've grown up with, that traditionally we have learned to use and eat and preserve and to me this is a -- you know, to having -- have Bostwick to be logged and shut it down, it's going to be just like the Tongass National Forest where no one can use it. It's going to be in the same category and I don't want to see it that way. I don't want to see us be like ANWR and everybody in the whole United States fighting over this little piece of land just to be logged. Because that's what we're leading to if we continue with this. Thank you very much.

MRS. SHEARER: I have -- this is Linda Rae Shearer and I just have one more kind of a little bit -- it's an issue that's not really an issue, you know, but I feel like I have to say it. I think that, you know, we all have access to world news nowadays, and so we all pretty know what's going on in the world and one of the things that really concerns is going on and that's -- I see it as shaving. You know, taking the forests of the world and just cutting them down to nothing, just because people want to go and have a nice hike, you know, like the forests that are around the -- I think it's Kilimanjaro, remember what we saw on TV that one, the people have lived there for centuries upon end, and have their subsistence lifestyles and then all of a sudden people -- rich people from Europe came in and they wanted to go and hike, and it was just the coolest thing to go and hike up there and so they convinced the people somehow, or the people were convinced that they should start cutting down their forests so they could build cabins for the hikers. To me that is obscene. I have never heard of anything so horrible in my life. I just felt sick to my stomach when I heard that and I feel that we're -- not only do we have our own small little area to protect here, and those of us who live here, you know, those of us who have -- feel a sense of responsibility for the area in which we live, we try to take care of it as best we can, and we're doing that by attending this meeting today and letting you know how strongly we feel against cutting the forest there, because we know it's going to be adversely impacted. But I feel, as well, in addition to that, that people like you who work for the Forest Service, you represent a national concern. And it's time for us to start thinking globally and how can we do this? This is one way that we can do it. Not just have a small narrow view of our lives, but to think that we are a part of the globe and in that way we can, by protecting our own area. You know, and if each person protected his or her own area then people are basically saving the planet, that's the way I think. And I think that you can also take that into consideration when you make your decision.

Is it really worth it, you know, we're cutting down these trees, how long is it going to take for these trees to grow back, what benefits do these trees provide to the animals and the people, you know, and the atmosphere, how much oxygen is going into the atmosphere, that should be a viable consideration for you. Because those trees are contributing oxygen and so that's just what I wanted to say, is that I think you could, you know, take our little narrow view which is very narrow of course because it has to be. But you could also, you know, take a larger, more global view if you were really making an intelligent decision about this and I think you are. So, thank you. That's what I wanted to say.

MR. NELSON: I want to make just one comment and I want to touch on a comment that was made earlier this afternoon about we may not have been here for centuries. We have been here, don't be -- don't be mistaken. Even though the Tsimshian Tribe has been situated here and on Annette Island for approximately 124, 125 years, doesn't mean that we just came here, we have documentation that my people traveled the coast, from the coast of California clear out to the Aleutian Chain. Our people left their homes for up to 2 years as they traveled to harvest seal up north. There was no such thing as a line back in our parents and grandparents time. We used the -- our people used the entire coast. You know our people traveled up and down. Our people traveled with canoes as long as 75 feet; 50-footers accompanied 75-foot canoes, you know, 8 feet high, 8 feet wide, you know. They -- we used the coast. You know, we used it for -- to survive. You know, our people have been around. There is documentation. You go up, further up north, westward, you'll find islands with Tsimshian names.

That's proof that our people have been there, you know, several. The coastline has always been important, for our people as far as survival goes, that's the only hope we had to survive. It may not be all of that today, but there's still a great deal, but only a handful of our people have more or less used the subsistence way of life a lot less than most of us do today. It's very important and again like I said I appreciate you folks coming over as Mrs. Shearer had indicated, we hope and we believe that you will make the right decision when that time comes, and not to log Gravina, because we are here speaking for all of our people. You know, our -- we know what our people's needs are. We know what our families' needs are. I commend those who have taken the time to come here to speak to you folks and voice to you folks our concerns about this project and not only our concerns, the concerns of our people on Annette Island. Thank you.

MS. MARTHALLER: And I thank you all for coming to this subsistence hearing and offering us your comments and I just want to remind you that this is one way that we get comments on this process, this is one step in the process, and you can

encourage your neighbors and your families, to also send written comments in. The comment period on this proposal is open until March 19th.

MRS. SHEARER: 19th, March 19th.

UNIDENTIFIED VOICE: Thank you for coming, and if there's any meetings in the future let us know.

MR. INGERSOLL: There is another subsistence hearing like this....

MS. MARTHALLER: There is another subsistence hearing in Saxman, on February 26th in the evening.

UNIDENTIFIED VOICE: February 26th?

MRS. SHEARER: What is the closing date, March 19th?

MR. NELSON: Where do we mail the written comments?

MS. MARTHALLER: There's an address in here. Do you have one of these?

MR. NELSON: Yeah. I have one of those yeah.

MS. MARTHALLER: Yeah. There's an address in there.

(Off record)

MRS. SHEARER:Borough, Ketchikan Gateway Borough. Now I know that Ketchikan -- the Borough and the city are thinking about consolidating, and in fact this could happen as early as the end of May, or as late as the end of August, what would happen to that land, would it be just folded into the new municipality, then would be controlled by the new municipality? Then do you have kind of a position statement from that potential municipality that might indicate what they're -- I'm sure they probably wouldn't change. It would probably still be the same.

MR. INGERSOLL: I doubt the change in local government would affect the position, of the local government on those issues.

MRS. SHEARER: Yeah. Uh-huh.

MR. SHEARER: That gray area doesn't reflect that Ketchikan owns all of it; there are State lands, there's a lot that are different.

MS. MARTHALLER: That's right and there's a map in this document that shows you the different land ownership.

MR. LANG: There's several different entities that control that non-Forest Service land there.

MR. INGERSOLL: That's right.

UNIDENTIFIED VOICE: (Indiscernible - simultaneous speech) The Mental Health land here that covers most of the area that the road would actually cross it? How would you get permission to cross that?

MS. MARTHALLER: Yes. We would -- we would get permission from them for the State lands, if we have to go across the University land or Department of Forestry land we would have to have permission from them.

UNIDENTIFIED VOICE: Thanks for coming.

(END OF METLAKATLA TESTIMONY)

Saxman Subsistence Hearing, February 26, 2001, Saxman

MS. MARTHALLER: If you could state your name, when you sit down.

MR. WILLIAMS: She's on the sheet.

MS. MARTHALLER: Is she?

MR. WILLIAMS: Yeah.

(Indiscernible - simultaneous speech)

MR. THOMAS: Too much paper work already.

MR. MARTHALLER: Okay we'll put that there, and you can sign your name.

(Indiscernible - simultaneous speech)

MS. MARTHALLER: Could you state your name before you start also?

MS. KUSHNICK: I'm Matilda Kushnick. Everybody knows me by Tilly, my Indian name is (witness states Native name), Double Raven, Dog Salmon (witness states Native name).

(Witness speaks in Native language)

MR. SHIELDS: Can we take a quick break before we get started.

MS. KUSHNICK: I'm through writing.

MS. MARTHALLER: Well let's her speak and then.....

MS. KUSHNICK: According to -- ladies and gentlemen, folks that are here, and our leaders from Saxman IRA. According to Alaska Native law, the way I see what they're doing now and I bet you anything it's going to go through, because they're supposed to by the -- by the law, they're supposed to notify all our people, everyone know it, before they look a place up, you know, just like Glacier Bay, and just like our Misty Fjords. I never ever heard anybody call Saxman or Ketchikan together to lock up Misty Fjords. I think Reagan signed that documents without our knowledge.

And Glacier Bay the same way, and now people are yelling because they can't fish there. This is what's going to happen to us. I oppose logging on Gravina Island real hard. The non-Natives and Natives alike, that's our pantry. Where we get our food from. I'll tell you of one experience I don't know if all of you know Red Bay, between Point Baker and Snow Pass, they logged quite a bit in there, there's many creeks in there they logged. You know, that's how many years ago, they logged. And do you know you go down the beach we're waiting for tide, because you folks know Snow Pass got really whirlpools there. We went down the beach to look for clams, gumboots, anything to eat from the beach, and you know those lady slippers are supposed to be red, they were thick with grey silt on it. Coming from the mountains where it was logged how many years ago.

So we moved to another place to get seaweed. The same thing, the seaweed's got silt all over it. We make our living along the whole shores of Alaska. Can't do it down south. It's too contaminated. But anyway. I'm a subsistence user, I raised 15 children. I got 52 grand and great-grandchildren. And praise the Lord, I haven't fed them from welfare or food stamps. The government of Alaska, Fish and Game, put all our Native people on subsis -- I mean on welfare and food stamps. You can't catch this kind of fish, you'll get arrested. Got to throw it away.

Now they stepped in, 2 years now, 3 years we never got ooligans, the people that are trained and know when to go there. I never see one Fish and Game took training on how to get ooligans. There's a whole bunch of ooligans up there. I talked to the guys that fish, how come, says, well couldn't leave because Fish and Game says they'll go when we say you could go. Now they never stated that in their school where they come from. Our people know, it's built into us when to go. Not only those guys were a blessing to all our people, Ketchikan, Saxman, Metlakatla, our subsistence food. We can't get it.

All the stores don't have it to give it to our people that are hungry. Bill and I can't go fishing there. These are strong husky men that go, you've got to be strong and husky to go fish for ooligans. And if everybody tell the Fish and Game this, they should not interfere with the ooligan fishermen.

Another lady come here to town, want the Tribal to sign papers to pick our berries, so I'm telling you some of these non-Natives are going nuts. And there's buildings for them too. I can't stand around and watch Gravina end up like Red Bay shore clean to Snow Pass. Snow Pass has seaweed there but it's filled with silt. Just think of-- they die off, and they grow back next spring, time to harvest, they're full of silt. That's what's going to happen to Gravina. The rain we have is going to wash those mud down and the shores will be full of silt. You can't get no shells, you can't get no seaweed. Eventually the fish will disappear from Bostwick. Everybody, non-Natives and Natives alike go on that island to eat. It's the pantry of Revillagigedo Island. Even Revillagigedo Island - that's not our Indian name, that's Kitchkaan.

I wonder how Spain would feel if I go over there and name their shore. So, I want my testimony published if you can because this is unfair. None of us took a part in agreements and yet the government spent a lot of money making these books because you guys' mind is already made up. It's already made up, whoever's slinging the pencil and pen around.

Your idea. Was not our idea. Our people -- we don't want to eat the cows from abroad, we don't want to get the crazy cows or mad cows up here. Kangaroos. It's true, the only way we'll -- we're going to survive and stay healthy is eat our own food. People ate their own food don't have diabetes and cancer. This is what we are fighting for, for our families. Not only that, Gravina is close, people got little speed boats go there. I don't know why you folks want to sell trees off of there, we're going to get the biggest storms hitting here, no trees, it'll be like a desert.

Why don't you sell them logs from all around where there's no people living? Why pick on our -- on our pantry there? It's our pantry, where we get our food from, in and around Gravina. Thank you.

MR. WILLIAMS: Thank you Tilly. Any other wish to make a public comment? Go ahead. Ginger, you need to come up here to the table, make sure that you've signed in, give your name and....

MS. FOX: My name is Ginger Fox, I live here in Saxman. And I just want it to be let known that I am strongly opposed to accepting this book and -- because, from the looks of it, and the thickness and studying of it there was plenty of time to involve us in the very beginning. And like Tilly said, that is our subsistence way of life on that island. We've always -- I was never ever raised on food stamps or welfare, we've always gone out and got our own food. Our legislator came down to my mom's house and he just made a comment that he was hungry for this kind of food. My mom took him into our pantry and he about fell over he couldn't believe all our food. And we just let him help himself to what he wanted. He couldn't get over how much food were from subsistence food. This is where we get our food from and there's so much there and with you logging all that off, I think you're going to destroy a lot food for all our people. And it's not only the Natives that live on that. It's everyone. Thank you.

MR. WILLIAMS: Thank you, Ginger. Other comments, Bill.

MR. THOMAS: Thank you, Joe. You know Tilly and I. I'm Bill Thomas. I am the chairman of the Southeast Region for Federal Subsistence. And the -- the testimony you heard from Tilly is not a new one. And she's been saying the same testimony for over 40 years, and there's no reason for her to change it because the effort is still the same. We never received any acknowledgment that these testimonies were heard, we don't know how they're analyzed, we don't know what role they play in anything. Once the sound disappears from this room we never hear anything about it again. I'm hoping that will change. I'm hoping that there'll be some indication in this process that these testimonies have been heard, they're justification, they're rational. The rational is compelling.

Gravina should be left alone. I don't care what kind of alternatives you have, this is my first involvement with this particular EIS. I've been asked in the past but I chose not to participate, but I came out tonight to see -- I'm not part of the Saxman Tribe, I am -- I am the only one that recognizes that. So what I would like to say. Now I could offer testimony myself, but there's nothing I could add that Tilly hasn't said, because what she said was very understandable, it was very valid, it was very compelling, and it's undisputable. So I would just like, somewhere in this process, that that sentiment has come from this community. Thank you.

MR. WILLIAMS: Pat. Bill you signed -- signed in?

MR. THOMAS: Yes, sir.

MR. WILLIAMS: Pat did you sign in?

MR. GARZA: Yes.

MR. WILLIAMS: Okay.

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MR. GARZA: I came here representing KIC Tribal Council. I'm going to speak on behalf of my own person; my name is Patrick Garza. When I think of subsistence, as we all do, it's something that was born into us. It's in here, we live off the land. We lived off the land for thousands of years, and what scares me is -- and maybe it should happen more, is that the Forest Service and the State of Alaska, should get together more often and talk about these issues, instead of quit trying to define what they really are. We know what they are, and when I think about subsistence what really scares me is the word "farmed seafoods". There should be no reason for that at all. Because if the natural resources were watched closely like that should be, there should be no reason for farm fish, or seafood, or anything else. Thank you very much.

MR. WILLIAMS: Thank you Pat, other comments. For the public hearing. Mr.....

MR. SALLEE: Is this just for Saxman people?

MR. WILLIAMS: No, you're more than welcome, this is a public, come on up, sign in, tell us who you are.

MR. SALLEE: I haven't signed.

MR. MARTHALLER: You can sign it at the mike.

MR. WILLIAMS: Just so long as you give it a Saxman slant, that'll be all right. Tilly?

MS. KUSHNICK: Another thing - ANILCA, is supposed to help protect our subsistence. I mean.....

MR. THOMAS: I'm doing that, Tilly.

MS. KUSHNICK: Oh you are?

MR. THOMAS: Uh-huh.

MR. SALLEE: I didn't bring something that was prepared specifically for this thing, it had more to do, with.....

MS. MARTHALLER: For the record if you'd state.....

MR. SALLEE: My name is Mike Sallee, I was born in Ketchikan and I'll read some of my comments here that I wrote back in -- way back in October of 1999. I was born in Ketchikan. I lived at Four Mile North Tongass Highway, before that road was paved. When I was nine, my mother started homesteading a 26-acre parcel at Downer (ph) Point, at the north end of Gravina Island. We built the structures, cleared and cultivated land, fulfilled the residing requirements for homesteads at Downer (ph) during the late 50's and earlier '60s. In 1960 we began leasing the home site of what used to be called Port Gravina at the north end of what is now Ketchikan International Airport. Ketchikan Pulp Company owned that homestead at the time, mainly for its log salvage beaches. I commuted by skiff across Tongass Narrows to our property at Four Mile North Tongass highway, from where I took a bus to attend a high school. Like many families at that time we lived a rural hunter-gatherer kind of existence. We burned firewood from beach logs for heat. We caught young black cod and froze and canned the fish for pet food. My mother canned meat from seals and sea lions, also for pet food.

We hunted deer and other game animals to supplement what we grew in our gardens or purchased in local grocery stores for our own consumption. I hunted deer on the estuarine areas, north of the airport as well as the muskegs and higher alpine areas clear back from the beaches. I even had a hunting trail established to the summit of California Ridge, which is the main ridge on kind of the northeast side of the island there.

The property on Port Gravina, which is that area at the north end of the airport had an acre or two of garden area with soil that had been built up for years by previous tenants of the property. The adjacent tide flats collected seaweed which could be wheelbarrowed easily up to the garden area to fertilize the soil. My mother also collected salmon carcasses from the nearby salmon stream as well as starfish off the beach for enriching the soil.

When the airport was constructed, most of the buildings on this parcel were razed and bulldozed along with the gardens. A few of the raspberry, strawberry, and rhubarb plants that once grew in abundance at this site still struggle up through the more dominant salmonberry brush that has taken over it. As a long-time resident of Gravina I have walked extensively there. I've walked the beach between the airport, and Vallenar Point close to a dozen times. I've hiked across the island from Port Gravina to Grant Cove and returned a couple times. I've hiked from Port Gravina to Dall Ridge and back once. I've walked all of the shoreline around the perimeter of Gravina with an exception of a mile or two of beaches east of Blank Inlet. I've hiked the low divide between Bostwick Inlet and Vallenar Bay. I've made numerous deer and grouse hunting excursions in the Vallenar Creek valley as well as the muskeg and hillsides bordering High Mountain on California Ridge.

And I'll skip some of this because it applies more to the bridge than it does the rest of Gravina. I say, continue on more roads on Gravina will comprise the resident wild life there. Black bear, deer, geese and ducks that frequent the estuarine area near Lewis Reef will be pushed out of that habitat, growing industrial noise will drown out the hooting of the grouse in the spring and early summer. As the indigenous wildlife gets pushed out of their beach fringe niches, I ask the question: Will public attitude toward wildlife grow more indifferent? Will black bears deprived of their historical access to spring and early summer beach grasses and fall salmon runs, instead target the trash that a percentage of unwitting humans leave unsecured? Ketchikan has recently closed its unfenced dump and black bears habituated the garbage still get into private trash receptacles.

On the purpose and need, how will we separate wants from needs. Native cultures have lived in Southeast Alaska for centuries without automobiles, imported groceries, mail service, aircraft, internal combustion engines, monofilament gillnets, repeating rifles with scopes, reinforced concrete, computers, TVs, telephones, and all the rest of our technological toys. Yet those cultures left us with all the plethora of natural resources that we extract with impunity today. What kind of resource diversity will be left if we expand automobile-based development and industry to Gravina? This isn't California, or Washington, or Oregon. We're some 400 further -- miles farther north in latitude than any other place in continental USA. The terrestrial habitat is substantially more harsh than habitats in coastal California or the rest of the Pacific Northwest. A motorized, development-based economy has grown in Southeast Alaska over the last half century or more.

Southeast Alaska has been the arena where grand-scale road-based silviculture has grown rapidly with a maturing of similar development in the lower 48 states. Timber beasts will argue that we need all of Southeast Alaska's marketable timberlands in order to provide adequate market choices.

I see a clear tradeoff of freedoms in bringing roaded access closer to my property. It could be argued that the lifestyle choices available to me in the early '60s allowed me roam at will across a lot of land on Gravina Island without interfering with property owners. There were few property owners that actually lived on their property and the low level of development meant there weren't many people to take issue with my trespass. That will likely change with roaded access to Gravina.

Finally, in closing, I feel quite overwhelmed by the bureaucratic onslaught of Gravina Island. It exceeds the demands of a fulltime job just to read and respond to the mounds of paperwork generated by bureaucracies, quote "just doing their jobs", unquote.

And I'd like to one of other thing, is that most of the Forest Service folks will be gone here a number of years. It seems like we get a lot of the higher-up in the chain there that end up moving on and we're left here with the results of what they brought us. And I think that's all I have right now.

MR. WILLIAMS: Thank you, sir.

MR. THOMAS: That had a Saxman twist.

MR. WILLIAMS: And it's a good twist. Thank you, Mike, I appreciate it. Other comments. Yes, Mr. Makua.

MR. MAKUA: (Speaks in Native language.) My name is Elmer Makua, and I'm wearing the hat of the Tongass Tribal member, I need to make that clear because I'm here under many hats, but because it's here in Saxman and subsistence, we need to speak as Tribal member and as a man, and as a father, and as an uncle, and as a brother, I need to address all these issues. And I want to thank Tilly Kushnick for her comments and all of those that have come up and made a comment addressing this.

I heard this evening that there was an extension to the EIS comment period. And I could add that in our agenda there must have been an extension to the public testimony record -- to the comments, or the questions and answering period because there was a lot of questions and that brings to mind -- you know, we had to cut it short because there's still a lot of questions, so in that sense I'd like to say I still have questions, in making a testimony per se, it's like a final idea, that's how I feel. I can't say, I can make a true testimony of how I feel expect for that I know that, that area is important traditionally, historically, spiritually, to the people here and the surrounding areas. I know that people depend on this area to use it for their subsistence use, and I heard that word significant, and only concentrating on deer, as a study to be able to use the word significant impact. But as you see, I come up here with many books and a lot of information and I still have a lot questions. In the EIS, it points to the subsistence uses, but then again significantly they only direct it to deer habitat and how it would be significantly impacted.

In that question I wanted to see where the State sat with that, and I refer you to the Central Southern Southeast Area Plan,

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and I just have a draft of it, but they finalized it and in that plan they have Bostwick Cove here designated JT 32 and I've referred to that information, and in there I have it here it's called managed resources. And in there it talks about Bostwick Creek has 20,000 square meters of salmon spawning area. Much of which is concentrated near the stream mouth and upper intertidal area. Eel grass, and coastal birds, such as Dungeness coastal via -- (indiscernible), such as Dungeness crab, shore birds, marine mammals, black bear, furbearers, and other near-shore associated wildlife species occur there. The area is heavily utilized by local residents for boating, fishing, deer hunting and other recreational purposes. The Tongass Fish and Wildlife resources assessment ranks this Bostwick Inlet BC use within the top 25 percent of areas important for deer harvest in BC use access by residents of Ketchikan. Upper Bostwick Inlet is recognized as an environmentally sensitive area. In the Ketchikan District Coastal Management Plan, which this is, this plan also mapped Bostwick Inlet and it refers to a figure S13 as an important estuary -- excuse me for my pronunciation -- wetlands and tide flats area in the adjacent low-elevation inlands as important upland habitat. Again I wonder if the Federal Government Forestry Service knows what this State is designating and this I need to say, it conflicts again for a number -- we can eliminate some of these alternatives right off the bat as it was pointed out by Susan, and that we know that cutting one tree in the ecosystem effects everything. And for the EIS not to reflect on the importance of the ecosystem and not fully meet, as it says, with the Tribal entities who are the ones that depend on the subsistence, whatever that word is. It's a word made up long ago to fit, so we could put it down on record. Subsistence means barely getting by, need to have. So, when I think of this -- when we come to a subsistence hearing, we need to have Bostwick, we need to have that. So I implore that -- I don't know how to put this, do I ask more questions, this information isn't put out to where just the regular person can understand it, unless it's come down and we've explained.

I have to admit I sat in on Alternative 3 when it was mentioned that Tribal members had consultate [sic] -- had come together and worked on it. I need to say that at that time, I was still misinformed and under the impression that it was still going to be cut no matter what we did. Subsistence for that part was not addressed at that point until we had brought it to the table. So my concern here is all the questions answered have all the possibilities been looked at.

You know, before I can make a statement I have to see all the information, but I know, I know that place is important. I know what happens when you have clear cuts and timber sales, I know what happens when you put a bridge across a creek. I know what happens when you put a road in and trucks travel over it. I know what happens when you cut a tree down. This isn't explained. It isn't explained about the road that continues over into private property, State land. Where's the EIS for that, what's the impact on Bostwick Lake, that it isn't explained. There's a lot of missing information. There's a lot of lack of consideration of asking the right questions, or taking the time to listen. It seems like this EIS started out bias from the beginning.

And again it's hard to make a testimony with all the right answers and the questions and the information when you open this book it's already saying they're going to cut it. It was already said that the Service prefers to look at 4 and 3. But the people had to put 3 in there; they always wanted 4. My concern is that they've done this many, many, many times, we've seen the results, and we know the impact. To have a big book like this you don't really need it, as it was pointed out earlier.

If I was to make a comment it would be to Number 1 - No Action. For that one I know what would happen. I know that the crab would still be protected. I know the salmon would be protected, I know the bear, the eel grass, the Dungeness, the goose tongue all of these wild life species that the people depend on, subsistence again, depend on, need to have not only in their diet but in their spiritual personal well being, when you go out there to provide for your family.

It's a very important essence, and as Saxman is the rural, Metlakatla very much depends on it also, is a rural, I think their comments are very important if I was to make a comment it would be Number 1, No Action. There is a lack of information here, there is lack of consideration, there is a lack. (Speaks in Native language)

(Simultaneous speaking in Native language)

MR. WILLIAMS: Other comments. James.

MR. LLANOS: Good evening, for the record, for this legal document, this tape that you are recording is a legal document, to be entered in the planning record as well as transcribed. My name is James Llanos. I'm here speaking of behalf of (indiscernible) people from the Hoots (ph) house, one of the Hoots (ph) houses in Saxman here. I'm speaking for Martin Perez and Dorothy Utterberg, who were meeting earlier and asked me some questions which led to Gravina and what did this whole thing mean, because they had not heard about any of this at all. Their first impulse was to -- after all this discussion, we identified some things and their preferred -- the Native community preferred alternative is what they would like to see, and that's the No Action alternative.

If you don't go with that, they would like to see no roads, if possible use helicopters with selective harvest. The next is to --

well if you have to have roads, don't connect them to the Borough. That will develop Gravina and it will be lost forever to the clans and kwaans of the area.

Of all the action alternatives, they would like to see the roads removed when you're done and replanted. And I'm not sure what this is, but it's the people of the forest can live in their homes the way things were meant to be. It was -- it was translated, it was Tlingit phrase and somebody translated it for me and that was the closest I could figure out.

MR. THOMAS: Well they referenced the animals, it happens sometimes, people....

MR. LLANOS: Okay. Thank you. If you have roads, they do not want to see any LTFs in Bostwick. They would also like to see protection of our ancestors' sites, keeping the Tantakwaan and Sanyakwaan actively involved. They do not want to see an impact of subsistence resources used by the ancestors and the people today, both human and other, and those people still to come. And this was a big one - they wanted the agencies to figure out how to get word to the clans also. Because these clan elders had not heard about Gravina at all. They live in little different life, they're sitting in their homes waiting for people to come to them and ask for their advice as elders. And they were not approached by anybody until one of them asked me the question, what is this about? And then for me, my personal comment, thanks for the food. That's it.

MR. WILLIAMS: Thank you James. Other comments here this evening. Bill.

MR. THOMAS: Thank you Mr. Chairman, I'd like to point out areas that lead us to this determination from within the village of Saxman. We have a lot of history to go by. Take a look at the northern half of Prince of Wales Island. I was born on Prince of Wales Island, and I was out there when there was no roads of any kind. And like Mike pointed out, we had pretty much the same, we didn't have any of -- all those items he had listed that results in the modern technologies that we have now. But that isn't the case today. Much of Prince of Wales has been clear cut. The salmon streams have been destroyed; the spawning beds have been destroyed. The deer habitat has been destroyed, the view shed has disappeared, I mean anything that could be violated on Prince of Wales with reference to natural resources has been violated significantly. There's one where we could use that. And we don't need that to happen, we don't need to set -- use that as a precedent and do the same thing on Gravina. Look what happened -- take a look up around that Kasaan Bay, that's been hit hard. Let's take a look at it. Another question I had, was, is this going to be a popularity type of a decision, we have -- we have let's say for instance we have a population of 1,200 or 12,000 people that want a certain alternative to make damn sure there's harvesting on there -- come hell or high water, or is the sensitivities of the people that have used the land for centuries, for their existence, is that existence going to be significantly diminished, depleted, destroyed. We need -- I think we need to consider that. I don't know whether it will be or not. But we need to weigh those in. I just hope that they are, I can't tell you, to not consider the people with money, but consider the people without money one time, thank you.

MR. WILLIAMS: Richard? Thank you, go ahead.

MR. SHIELDS: Just right here. My name's Richard Shields for the record, last name is spelled, S-h-i-e-l-d-s. Quite a few people spell it S-e and that's always wrong. My comments to this here Gravina Island timber sale, I oppose it and No Action is to not do it, is the way I'd like to see it happen, the comments were already addressed, that you're going to be interfering with our food, our lifestyle of living. And to me I believe this is just a formality that the Forest Service needs to do, I think they're going to be -- I believe it's going to place irregardless of what we say. But it's just a procedure that they need to go through, to say that we've done it, it's documented so let's do it.

I oppose the timber harvest there, no matter which way you're going to be getting it out of there, because no matter what you do you're going to be interfering with the subsistence, with the lifestyle of food that comes out of there. Every time we say and talk about the lifestyle of food that we have and that we put on our table to eat and to survive on, it's commercialized, and we are held back and we cannot eat it anymore, so we have to pay for it. Long time ago, we never had to worry about the word subsistence. There was always -- the lifestyle of our food was always there, never had to worry about. Now we have to stand and stand guard so to speak on how we're going to get our food on our table when we don't want to go to the commercial store to buy it. If the U.S. Forest Service was willing to work with us, the Native people, without a doubt they would know us by name, they would know us by looking at us, what clan we belong to and where we came from.

We look at Native people that are around Southeast, we know where they're at and we know who they are. We hear a name, we know what community they come from. The U.S. Forest Service hears our name, they have no idea where we come from. We have to tell them where we came from and who our family is. Within the Native community we know who we are, we know how our food comes to our table, and how to take care of it. But yet we always have to stand guard and try to protect our foods against a formality. There's nothing that's going to stop them from doing it because it's just a formality. And I feel saddened by that.

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It's really hard that we're given a document and we have to choose -- I want to know when I'm in consultation, whatever that word is, if I'm doing that right now, please let me know, because I want to be informed of the big words that is used within this document, if it is taken place. In this document there are words that mean certain things, it means something totally different to us. No concern, means no concern, but yet in the public comment, it is not defined on what a no concern -- I hadn't heard that -- heard that no concern what that means to certain areas. Only the public comments of the Native peoples that stand up and say this is what my concern is, I want to be able to protect my food. No concern. I am saying I am concerned about our food. Thank you.

MR. WILLIAMS: Thank you, Richard. Winona?

MS. WALLACE: My name is Winona Wallace and I'm a resident of Saxman, I live at 2539 Killer Whale Avenue, and for the record I kind of wanted to step back a few -- I guess a few years I guess, because when the Tongass National Forest, which is a huge forest became available for what they call land use designation somebody, whoever, and I don't know who exactly decided to, at some point in time this year, select Gravina for harvesting and that forest is really huge and I don't know why it has to be the area that people use for subsistence today. I mean it's a huge forest and I don't know why it has to be that particular area.

In my prayer earlier I had asked that we be willing to consider seven generations after us. And we're not going to here, I'm to going to be here, but I hope that my descendants will be here and they can go out into that water and harvest. Several years ago there was a subsistence hearing that they had here and at the VFW, or I can't remember, it was Eagle's -- Eagle's Lodge, or Eagle's club or whatever, and I took my girl there, she was 8 years old and they were choosing not to select Saxman as a subsistence village. With all the testimony that was heard there, they decided to designate Saxman as a subsistence village. Well, it behooves me today that, you know, her comments as an 8-year-old, she's now 19, that she can't get abalone from out the waters here.

And to know that silt is on seaweed, is really affects me personally, I don't know if Forest Service people eat seaweed, it's prepared a variety of ways and probably has nutritional value that nobody will be able to understand. So I'm kind of concerned about who designated land use areas from your agency, it's a huge agency and there's other, maybe preferred areas. I don't believe that the Forest Service is necessary -- necessarily the culprit; our own Native Corporations have harvested huge lands for economic gain as well. And what is left now for youngsters?

I would hope that people replenish in a proper way, you know, so there are other agencies as well that we, ourselves, aren't really probably being the best caretakers at times -- at times, but I'm opposed to having anything happening at Gravina, because it's right next door to us.

The other thing I wanted to say is that, Jerry and Susan, you come with maybe your personal integrity, you're representing an agency and we will still be here when you leave your job, and wherever you're coming from and your integrity is on the line to be able to create this government consultation with us, we will look to you. Joe will raise his voice, it will get embarrassing, but I'm saying that we look to you to be -- to understand that we're trying to be sensible caretakers. And of great concern to me I guess, is the fact that John Autrey mentioned that there are artifacts on that island, and if any road or any access is allowed there, who is going to protect those artifacts, who's going to ensure that there's a protection to those artifacts. That's a big question and it's extensively - who is going to protect your belongings, the safe deposit that you have at First Bank. Well those things that are in the ground, that are a connection to our past, is our safe deposit too. So my concern is pretty much generations after us. I don't want it to be a battle, I don't want to believe that the Forest Service will not do anything.

I believe that, Susan and John, that you have some integrity to go with this and to come back to us and reply back to us -- to advocate for us, because we're community members as well, so those are my comments. Thank you.

MR. WILLIAMS: Mr. Wallace.

MR. WALLACE: My name is Lee Wallace, a resident of Saxman and I want to make a few comments and I want to thank James for consulting with some elders, that was some consultation there before he came here, he went to speak with a couple elders that are pretty much homebound and I thank our other elder Tilly for showing up tonight and the words that she shared and I will just briefly go on the record saying that I go along with the record as -- the other elders saying No Action.

Of course they have it in the back of their mind that okay, they may vote for No Action. But they're thinking in the back of their head that probably the Forest Service is going to do something anyway and so they were -- going in priority, okay. Then they said okay, no roads, is the preferred way to go. The least damage it could do to the environment would be to helicopter it, logging which is -- of course it's the most expensive and it's the least harvest. If they're thinking on those lines

and if that's going to happen I guess I would have to consider that also and I would really support the elders with the consultation that Jim Llanos had with the elders and thank you, that's about it. Short.

MR. WILLIAMS: Nora?

MS. DEWITT: My name is Nora Dewitt and I -- I've made some notes here, and I kind of wanted to sort of like talk a little bit about the last meeting in January that we had when the Forest Service came out and met with us and I felt the same way that the elders, that James consulted with when the Forest Service was here because they made a comment about -- well, they said they've held off harvesting and now it was time to address Gravina. And I really felt like they were going to do it anyway, so what was the best way so that it would be the least damaged. And that's how I was thinking until -- and I want to thank Elmer for coming and talking with us, because it explained a whole lot more to me because Gravina is just right next door like everybody's saying and you know I think that Tilly just eloquently expressed what Gravina means to the Native community of this island. And I commend you, Tilly, for your words, because that's exactly how it is. When we go -- I don't -- I don't have a boat, I don't go out subsistence hunting. Usually it's given to me, or I go to the dinners and it's provided and I look forward to it. And it's always a treat. And it's always nice when you go to someone's house and they put some Indian food out in front of you and you sit down and you share the food with them and you eat. And it always feels good.

But, you know, Gravina is so important to our community that -- that I too am saying no harvesting, you know, when, at the last meeting, those comments were made there was also a discussion from our council saying well maybe we should look at just helicopter harvesting, and then we talked about that, and then tonight again it was -- another thought was brought forward, that is if they're going to helicopter harvest, then the comment was made, well, there may need to be a barge then at Bostwick. Well the story changed again. You know, first it's just helicopter harvesting and nothing else, no roads and so it makes me leery to even give an inch. You give an inch take a mile; we can't afford a mile.

When the Forest Service talks about consultation, and the definition that was given to us is, they ask for Tribal government's input into the process. Well at the last meeting when the Forest Service came out to me, we were talked to, because we didn't have enough information to do any kind of real good discussion. I didn't understand, the big book was put down and the maps went up and words were said. I had no real understanding of everything that was being said, I needed the time to assimilate it, I needed the time to talk about it, I needed the time to -- you know, to talk to others. And there was a -- one of the Ketchikan IRA council members that I was speaking with mentioned to me when they're shared information and that is like how I am, too, is I don't immediately like to make a decision. Because when I sit at the table I don't represent Nora Dewitt, I represent the people of the community and I've got to go and talk to them. So when there's a decision like this that's coming forward, we can't just say, let's do this, let's do that, we need time to talk to our people because they're the ones that are going to be impacted. So when I saw in that document there about consultation with the IRA council, to me consultation is when you sit at the table and both sides are talking. But to me that isn't what happened in January; in January we were being talked at. And we didn't have enough information to really give forth any kind of remarks or comments in an educated manner because we really didn't understand. I didn't understand, and I really want to share that. And I know that when we enter into a Memorandum of Understanding with the Forest Service, that's something that we'll address, is what does that word mean and what do we expect as a council and as a community. And put that down in our MOU, so that there isn't these kinds of misunderstandings.

Another thing I wanted to point out is the green coloring on the EIS, the maps in the EIS, in there it says, in the letters that describes that green coloring, it says that the green represents the harvest units. And then it says that this is the combination of conventional and helicopter harvest systems. Well, my comment on that is that's too broad because we need to identify those kinds of things because we need to know does this mean a barge, does this mean a road? What does conventional harvest system mean, I don't know? And it does say that in the map. So, you know, the other thing is that, we as Native people, need our subsistence food. We crave our subsistence food and I think it was eloquently described by Elmer this evening about what it means to go out and put up Indian food. You know, my husband passed away in '97 and we did a year party for him and I had no way to put up Indian food. I didn't know how. And Joc, as one of husband's clan, came forward and he said I want to put up the fish. And he allowed me to help him. For me that whole process was so healing because not only did I work with Joe in doing that, and my son-in-law and my daughters, we were putting up that fish and giving it out to people who gave from their heart to me and to my husband in his hard time was something that I can never ever repay. It was something from way down deep that I was able to put out and able to give with a lot of pride. Well there's also something that Elmer mentioned and that's to the non-Native people. When you folks do your food, and you have things that you like, you know, whether it be McDonald's, or Burger King, or pizza, I know sometimes you have this craving and you just got to have this kind of food. But let's just take a traditional turkey dinner; when you go to put on your turkey dinner, that's a big deal, that's Thanksgiving Day. That's the day that you're going to go, and you're going to eat your turkey; you're

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going to dress it. You're going to you know, go to the grocery store, you're going to take the time, you're going to bake your pies way ahead of time, you're going to make your bread and it's a big deal. So you do all that stuff and you lay this fine spread out on the table, and you invite your family, your friends, the people you love to come and share this food with you. It's a big deal. Everybody sits down, everybody shares, everybody has good feelings, warm feelings, everybody tells you what wonderful food you've had and it feels good. And then everybody thanks you and then away everybody goes.

That's the way it is with our subsistence food. It's that way when it's gone and when you hunt it. It's that way when you prepare it; it's that way when you eat it. It's that way when you give it away. It's a whole healing circle. Well you folks, as was mentioned earlier, have limited money, so you put a lot of money into the EISs, but you still have limited money, you have budgets, that's just the way the Federal government operates. Well the Native people, we have limited substance resources too. We have to -- we have the responsibility to protect those. But because of mishandling when we trust something, it's either mishandled, or it's not adequate protection, or because there's an abuse of processing, or because the resources just run out, been taped out by people putting roads in so they can get into those resource areas, there's no more. We can't take the risk, because it's our future generations, we cannot take the risk. We have already risked too much. We've already lost too much. We can't risk anymore, because we have to protect this for our children, for our future generations as Winona said, seven generations forward. We need to protect those. We can't take a chance on any unknowns. We can't take a chance on maybe a barge is going to go in here, maybe a road's going to go in here. Maybe a road isn't going to go in here, you know, maybe we're going to cover up that road and replant in that road and there won't be any damage, you know, there may be silt, there may not be -- we cannot take chances like that, they have to be absolute, because we're talking about a resource that's not going to come back - once it's gone, it's gone. We have to protect and it's our responsibility to safeguard, not only for now, but for those future generations; we don't have a choice. That is our moral, our spiritual, and that is the reason why we're here, is to protect mother earth; that is our charge as Native people. For these reasons I'm against harvesting and I want to state that the EIS on the Gravina Island timber sale does not provide the assurances or protection for our subsistence way of life. Thank you.

MR. WILLIAMS: Frank Seludo.

MR. SELUDO: Hi, my name is Frank Seludo, I'm on the Saxman IRA council, and what I'd like to say, I call -- my grandma called me before she -- before -- just as we got started and she said that she would not like to see the raft or the logs down near the water out of Bostwick. And the subsistence thing. You know I've heard a lot of stories about my grandpa, you know, you did a lot of deer hunting out that way. And that was 20 -- you know, he passed away 20 years ago. And this year, me and a friend went out and spent 4 days and didn't see one thing out at Bostwick and so if I was -- I would choose not to have any action out there just for the fact that the deer, there's not too many deer out there and so we -- thanks.

MR. WILLIAMS: Mr. Makua, just for the record if you would note that Frank Seludo is the youngest IRA council member; he's 22 years old and I think that that's very important to know. Because not many 22-year-olds would get up and do what he just did. Mr. Makua.

MR. RICHARD MAKUA: My name is Richard Makua, I'm a -- I'm here to represent my family. My brother is -- Elmer Makua is the speaker of my clan, up here. And I'm speaking in regards to my grandmother: how old is grandma now?

MR. ELMER MAKUA: Ninety-two.

MR. RICHARD MAKUA: My grandmother is 92. I have heard from my family members down south that she wishes to have more Native food. And the reason being is because of her age. We have magnificent doctors in California, Seattle, all over the world, but since she has been eating her Native food and seaweed, it's been helping her. And I believe that my grandmother would not want any type of access on that island. I talked before about being a truck driver and seeing the types of damage that can happen. And I would like protection, but I have no idea what DOT has that can help as far as regulations for equipment over there.

I also like to speak for those who could not make it here in the spiritual realm. I feel -- I am compelled. I have been sitting over there listening to everything and no one has talked about the sickness that we have in this world. Has the Forest Service conducted any kind of special investigation on plant life over there, through the medical part of it? Have spoken to any kind of elders about medicines that could be used in the future for cancer, and things that we have no idea what's happening? I know that when you cut down trees, you damage a lot. I know that some of those things take centuries to grow back, and I'm not talking about trees, I'm talking about plant life that can disappear. And we could have a chance to cure something, and we have no idea we could have. So I want everybody to know that I believe in God, and I hope He's here tonight to help us figure this out.

So, I'm worried about the ecosystem. And if that bridge means that much to that many people in Ketchikan, because I've talked to people and they -- they already have it in their mind that it's going to happen and they say it's going to be a big beautiful bridge. I don't feel we need it. Right now I think that's pretty unique to get on a ferry and then ride over to Ketchikan from the airport. I know it's inconvenient in a lot of ways but I don't think we need a big bridge unless we had a little city over there, and right now all we have is an airport. It does not justify to spend that much money on a bridge for an airport, so there's bigger people involved here.

Like everybody was saying, why are we picking on this island? Are we trying to justify a bridge? And if that's the case, I don't want the bridge, I don't want anybody touching that island because I want the next generations to have something left. Thank you.

MR. WILLIAMS: Thank you, Mr. Makua. Other comments?

MR. KUSHNICK: I have one comment.

MR. WILLIAMS: Okay. If you -- for -- because it's being recorded.

MR. THOMAS: Doggone it, come on.

MR. KUSHNICK: I had one comment. Just suppose that went through - the logging. I hear there going to put a barge at Bostwick, you don't know they will or not, it takes money to get a barge. Another thing, Bostwick has fed a lot of people. There's crabs in there and there's fish. We go in there and fish too.

MR. THOMAS: Asparagus.

MR. KUSHNICK: And all the beach asparagus - like I say, the whole shores of Alaska is subsistence. In Sitka, where that log's floating, one guy that's been on our subsistence committee, said -- he had to come and talk to me.

MR. THOMAS: Martin?

MS. KUSHNICK: No, another one. Anyway, he said a guy anchored where those log rafts used to be, first they had a ring down to check how deep and then they anchored and finally they pulled that ring - that's what you use on a seine - it was bright brass color, the anchor was all beautiful shine, some chemicals was in the bottom from the trees. So that's how their area -- and Sitka has lot of good subsistence areas. Those logs, the bark and everything go down to the bottom, they have nothing on the bottom. So that's just what will happen to Bostwick and that other one over there, and Dall Bay, so I'm highly opposed to logging there. The government should realize that it's feeding our people. It's -- that island is a pantry for our people. So he -- and ANILCA supposed to work for us on our subsistence. Forest Service supposed to protect the Native people. So I want protection real bad.

You know when they started logging there, Fish and Game's going to come in and say you guys can't hunt around here, you might shoot somebody. I'm going to get me a good -- get my gun good and loaded and shoot 15 or 30 at one -- you know, if I hit one of those loggers, tough. So, no logging.

MR. THOMAS: Those loggers taste good over open fire.

MR. WILLIAMS: Pat?

MR. GARZA: My name's Patrick Garza, and I spoke earlier on behalf of myself. I am now representing KIC Tribal Council as a council member for the year 2001. The council is in retreat right now, they should be back tomorrow, so in the near future, KIC Tribal Council will submit a statement to the Forest Service for the record.

MR. WILLIAMS: Thank you Mr. Garza. I really want to wind this down now, is there any other comments; Mr. Thomas.

MR. THOMAS: Thank you. I have to leave, my phone call was from my grandson. Before I do I want to thank IRA for posting this forum and Forest Service for all the good information. I am quite familiar with the EIS process, and I agree, it's a job, it's a job you've got to do. And in my involvement with provisions of ANILCA, I have -- my primary agent in Region 1 is the Forest Service, so I do have a close working relationship with the Forest Service and it's a positive one. And I know you guys are more human than a hemlock tree.

I know you have emotions. I know you have feelings and compassion and -- but in your kind of work, you get paid to wear a game face, and I appreciate that, and I respect that. So, however this information is used, I'm sincere when I say that I hope that a voice from this group is being heard and considered because we've never had the luxury of being acknowledged in any

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kind of a document prior to now.

But I do have to leave, and I appreciate the opportunity to speak and the re -- I'm a chairman of a regional representation, all of Southeast is my region, so I'm at -- I can at will speak on behalf of any part of this region and so, for the record, that's what I'll be doing this evening. So that's how you can reflect my comments. With that I bid you good night and thank you very much to everybody.

MR. WILLIAMS: (Native language spoken) Finally, I just want to make the comment that I made earlier for the record. My name is Joe Williams. My real name is (Native name stated). My mother is from Wrangell; my father is from Cape Fox.

For the record, the document, this draft copy of Gravina Island timber sale, I violently object to it primarily because I've stated for the last 10 years and I don't want to have to go through this again with Mr. Ingersoll - perhaps he'll move before someone else comes along. But I do not want to see another environmental impact statement on my desk without the names of traditional people in that document. This is -- the way I look at it; it's a serious violation of the Federal government's trust responsibility.

My preference would be, I would take a lot of confidence to see that our Native people who have spoken this evening if they would -- their names be on it saying that this is a good document. Then I'd have some full faith and confidence in this document. Today, I do not have that trust. We need to come to grips -- Forestry Service, we need to come to grips as a government, government agency. And that is defined what Tribal consultation truly means. I don't want again to read a document in two weeks or three weeks and saying that you have had a Tribal consultation with the Saxman IRA, because the way I read this -- the way I read this today was what this, instead of saying you the Tribal consultation with the Organized Village of Saxman and they support it, and that I am violently objecting to.

Now, in reference subsistence I want the Forestry Service to consider subsistence as the spotted owl was considered in the lower 48. Let me reiterate that. I want the Forestry Service to look at subsistence as the spotted owl was looked at in the lower 48. That one animal drew more attention than the subsistence way of life here in Alaska has.

I, too, share the same opinion that was stated here tonight. No matter what is said here tonight, you're going to cut timber anyway. You build a road, no road; you build a road who's going to police the road, who's going to make sure that that road is supposed to be done exactly the same way it should be done. I've requested, for residents of our community of Saxman, to be part of this team for this very reason. We have here in Saxman an unemployment rate of between 45 and 80 percent unemployment rate. The United States declared back in the early '20s, and '30s, declare this was a depression when it got up to 10 percent. What do you think we're living here today? You have a trust responsibility and my request is part of that trust responsibility is to employ our people to be consultants to you so that when they come in and say -- when Mr. Makua, come in and says, I was part of that, I have full faith and confidence in Mr. Makua. When Tilly Kushniek comes in and says I was part of that, I have full faith and confidence in her comments, because she and he have lived the life of subsistence. It's not just a word it's a way of life.

In our Tlingit language we would say (Native language spoken). No more. Quit cutting our trees, because you cannot say sitting there behind the desk cutting this tree will not affect our way of life. Now we received the document last month. Two days before -- before the meeting that we had Tribal consultation, and expect to absorb something that took perhaps a year or more to develop. Keep in mind, this president for the Organized Village of Saxman, has to not only look out for the Forestry Service. This Tribal council has to look also not only after the Forestry Service, Indian health, Indian reservation roads, Indian child welfare acts, social services, EPA, Department of Defense, Department of Justice, and there are many more, these are just a few. And then you dump a document like this on us 2 days before and say absorb it, understand it so that you can make comments. I want to say one more time, I want the Forestry Service to put Indian named people on this, pay them the same regular wage, that they would pay anybody else, that would help the 45 to 80 percent unemployment rate to be dropped.

Mr. Ingersoll, you are meeting with the deciding group here today. This council is deciding for the village of Saxman. Their president is speaking to you now, and yet I am not talk to the deciding maker -- decision maker, of U.S. Forestry Service. That's how you wish to treat the Organized Village of Saxman, we will send our second-rate man, our third-rate man, we'll send a councilman. You want us to make a decision, we'll have the decision makers there, as we want the Forestry Service -- Forestry Service decision makers to be at the meetings. And if that means that we go higher than you, Mr. Ingersoll, this is an official invitation to Mr. Tom Puchlerz who will be making this kind of decisions, and if it isn't Mr. Puchlerz I want his boss to be here, because the way I view this, this is very serious, you want to call this Tribal consultation, you bring your people here.

Well, finally that as a young man and a highly respect, because he is a young man, he became our council member at age 21 and is speaking for his people at age 22. Not many people do that in today's world. And the person that he was talking about, his grandfather is Henry Jackson. Henry Jackson fed people in this community, because of his ability to hunt deer. I am living today because of Henry Jackson. Because Henry Jackson brought out a deer to our house and put it on our floor and said "That's for you". Unless you come to the -- unless you lived where you didn't have -- you will understand the meaning of when a man walks and knocks on your door, you open it up he walks in throws a deer on your floor and says it's for you, unless you have lived that you will understand how I am feeling today. And when you start cutting, who's going to police it? Who's going to police it? Who's going to have the ultimate authority to say that's wrong?

My comment, as a person, and I believe I can speak respectfully as president of the Saxman IRA, that no cutting should take place. I'm going to request of the council that we develop a resolution to say no cutting shall take place. I just finished with a meeting in Washington, D.C. just last week and a phrase was stated. Do not make any decisions about us Indians unless we're there. And that's what I'm asking. If you decide to cut let us know what you're going to decide before that decision is made. But my request to you is this, no cutting, because, as Mr. Makua stated, then we know we can still go after our subsistence way of life. Then I know Henry Jackson will be happy, my father will be satisfied because he was the leader of our family at that time. And Henry Jackson helped our family. (Native language spoken).

With that we can close as you so desire.

MS. MARTHALLER: Are there any other comments? All right.

MR. SHIELDS: I have one more comment, John. It's kind of bothers me some just sitting here about the comments on question and answers. We will not know what the question and answers are going to be in this document when it comes up again, because it's not going to be documented.

Questions were -- comments were said, and questions were asked and answers were given but it's not going to be given in this here, because it wasn't the appropriate time to do it. Because the recorder wasn't turned on or the typist wasn't typing the questions and answers, only by our staff that we had, that we'll know the questions that were put out there. The only comments that they had is what we gave from ourselves, and that's what always happens is that we give from ourselves and we give from ourselves.

And like it was mentioned, you Forest Service people will be going. How many communities will you be going from, I understand that there's a G1, G2, G3 as you advance you go to different areas. The G3's up in Anchorage, the G4's up in Fairbanks, the G6 is someplace -- some other location. Not knowing that terminology that may even be the wrong one. But irregardless of what alphabet number that you go through or what number that you do go through the sequence, guess who's going to be here. The ones that spoke here tonight, that gave the comments, but the questions and answers will not be documented. Thank you.

MR. WILLIAMS: With that I would really like to draw it to close. I'll have Tilly make her final comments, and before council members leave I really need you to remain for an executive session, okay. Will you do that? Tilly?

MS. KUSHNICK: Well, Mr. Chairman, I'm very much in favor for you folks to write a resolution that we oppose logging on Gravina, and to be sent to legislatures, and governor and congress, to the right people.

They're working for us, they're my servants they're working for me and they're highly paid. So we tell them -- we have to tell them what we want and have it documented and ruled. I don't want Gravina to end up like Misty Fjords and Glacier Bay. It's the only place that people could go there without mishap or something. Otherwise they have to go clean across the straits. That's our pantry, from vegetables to meat, and poor loggers, they better be careful. Wear iron clothes, iron, how you call it.

MS. MARTHALLER: Well I thank you all for coming to the hearing tonight and with that we'll close.

MS. KUSHNICK: I wonder if you guys could put it in the newspaper how we feel here.

MS. MAKUA: I went to go do my weaving, so I'm glad I made it back just to be the last person.

MR. WILLIAMS: You can sit right here.

MS. MARTHALLER: And if you could say your name for the record.

MS. MAKUA: Thank you allowing me to be able to do this, I understand you were closing. But it's really important for me

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to be able to voice my opinion here, as well as the questions that I had earlier.

This concerns me greatly, this Gravina Island EIS. The way that I feel about this personally, not only for myself, but for children and my children's children, for the next seven generations, I'm thinking about them. Now I've seen a whole island, it's called Prince of Wales Island, literally cut - streams damaged by the fallout of the trees, I've seen landslides, I've seen fish creeks destroyed. I've seen what it's done to the deer population and to the plant nation. That the animals survive off of.

So the effect of this concerns me greatly. And what I would have to say to all of this is, if I was to choose one of these it would be none. I would say don't cut at all. And I have to apologize about leaving earlier. That's just the way that I feel, and I'm speaking for my children and my grandchildren, and for my mother who isn't here, and my grandmother who isn't here, because I know she'd say the same thing. Don't cut. How can you say, with all these maps and all these alternatives, that there will be no impact. How can you sit here and say that? I have to disagree with you, because of the practices that you have shown in the past. In particular, areas where there should have been no cutting and no consideration for our wildlife or our fish habitat.

When several important resources occur in the same management unit, all cannot receive the same degree of attention that proponents of each would like. For example, the best timber stands often occur in valley bottoms adjacent to productive and salmon and streams. Because cutting riparian vegetation may cause degradation of stream habitats, maximizing timber removal and maximizing fish production may be incompatible [sic] -- incompatible management options. The resource used with the greatest amount of political support will usually receive the most consideration during the land use planning. And the other resources may suffer as a result.

Looking over the Gravina Island EIS unit data cards, it was easy to see that the Forest Service still knows nothing, of the natural processes of the Tongass National Forest. According to the unit data cards, most of the EIS, and I state this again, is of no concern.

This is not resource management. It's called exploitation of a land resource. And it's genocide against our people. Because when you go into an area and you cut, and you say you won't do any damage, I'm sorry, but prove me wrong, there will be damage done, especially when you're talking about putting roads and I'm looking at this, there's lakes, there's tributaries to the lakes, the transfer facility sites that you're talking about, that will all have a great impact on our seaweed gathering, on our clams, on the deer -- on the deer. What about the birds, what about the nests that are over there? Why come in so close and say that this will not have an impact on tourism. Oh, it won't affect the tourism, the tourists won't even see it.

Well I'm sorry, but I will see it, and my children will see it, and my children's children will see it. I would make a suggestion that you sit down and you talk with the elders, the ones that are left, and you listen to them, taking all politics aside, and hear what they have to say, and how they lived at one with this land from time immemorial - see, we didn't just come into this new, our people knew how much to take, when to take. They didn't over-take their foods, over-strip their foods. But that's what's happening to our forests. This is one of the last areas where you can truly say we have forests, yet you want to keep on coming in and you want to keep on cutting; it doesn't make any sense.

And I hope from this meeting, this is not the last public testimony to be heard, because they're voices that have still not been heard. And to not be able to give them that opportunity they're not allowed to use their voice and express themselves, such as I am, sitting here. I have been to several of these meetings in the past. I've read these books from front to back. I've given testimony, but nothing happens with the testimonies that are given - I'm sorry, you cannot sit there and tell me they have. They just haven't. So am I sitting here wasting my breath because the information you're taking, are you going to utilize it? Are you going to hear it? What are you going to do with it - put it in a book, in a Final EIS statement and say I'm sorry, but I didn't want to listen to you, so we picked what, 3 or 4? That's all I have to say, thank you for listening.

MR. WILLIAMS: Thank you, Joyce. In closing I just want to say to those of you who submitted a -- your comments, Mr. Makua, James, Pat, and Ginger, Mike, appreciate it. Thank you for taking your time today. And also Tilly, and Nora and Richard, Winona, and Lee. Appreciate your comments, and with that I trust we'll have a more positive report at our next time we get together. And again keep in mind the invitation is standing that Mr. Puchler attend so that....

MR. INGERSOLL: If you'd like that, we have a lot of time before the end of the comment period in mid-June, we could continue our consultation with the Tribe through a meeting with Tribal council and bring Tom.

MR. WILLIAMS: Okay. I'll address it with the council tonight and see when would be a good time for us, okay. With that, this portion of the meeting is adjourned and we'll take about a 10-minute recess.

(END OF SAXMAN TESTIMONY)

Ketchikan Subsistence Hearing, April 23, 2001, Ketchikan

MR. JACKSON: My name is Willard Jackson, and I was sent here by our elders council. The Tongass people, and Martha Johnson, she had said -- had to leave to go home. Esther Shea, Kelly Hoff, myself, my brother Butch. But I'm also the hitsadi (ph) (spokesman) the Bear side. My nephew Elmer is President of our Tongass Tribe.

A long time ago when I was growing up in the Village of Saxman, my grandmother and Elmer's grandmother, my auntie and many of the village people from Saxman would migrate down into Bostwick, Stomach Bay, Dall Head, and harvest wild asparagus. When you look at the Bostwick area as you go in there, to your left side, during the end of April, first part of May, you'll see people going down in that area harvesting wild asparagus, along with dropping their crab pots.

When you look in the Bostwick area, the scenario where I took my sons, it's an area where I'm going to take my grandson, he's 3 years old now, 3-1/2. It's an area where I trained my boys to hunt. Because if you look down in the Bostwick area, when you look down here at Judy Point, that area is just a valley all the way down to Vallenar. It was a wonderful area to teach my boys to hunt and learn -- do new methods of hunting. My brother Butch, used to take me down to Bostwick, when I was as young as these young boys walking around here, 4 or 5 years old. My brother used to take me fishing. Drop halibut skates off of Bostwick, drop halibut skates off of Dall Head.

If we log in the Bostwick area, or anywhere on Gravina, you're taking away our subsistence, our way of life as human beings. Some of us in our lifetime have to go hunting to feed these young kids. And if we go to log in this area. And it's the closest area to Ketchikan for the Tlingit, Haida and Tsimshian people, the people of Metlakatla, of Taquan, as they journey over there to the hunt. They journey over there too to get the wild asparagus. They journey over there too to seal hunt. They journey over there to crab. It's the closest area, within the Ketchikan area, to do all this.

I talked to my mother, Esther Shea, just before I came here, and I asked her if there's anything you'd like me to say Mom. My mom spoke about desecration. I didn't even think she knew what that meant. Desecrating our way of life as human beings. You know we've come a long ways today, 2001, in what we're doing so our children can survive. I think it's come to a time and a place to where we've taken all we can from Mother Earth, it's time to give back. It's time to give back to it. The earth cries, as our children cry sometimes because they go hungry. It's from the taking, the continuous taking of our way of life. And that's the subsistence area. I'm not -- I'm not angry about any of this, it's what my father used to do. Milton Jackson used to come and speak. What's going to happen if I don't say anything when I leave this world. What are my children going to say. "Gee, my father never stood up to say anything for me." My father never tried to wash my face. So I come on behalf of my children and grandchildren, that I think there has to be a better -- better way of life for us here. Instead of, you know -- I've lived off the forest all my life, longshoring. But after thinking about it for a few years and looking at it, you know, hearing the cry of our people in the gravesites. We have a young woman down here that's weaving baskets, that's her way of life and we can take that away from her if we choose. There's another weaver over here, if we choose to do that. There's areas out there that are rich in hunting. My brother Butch hunted there one time. There was a pack of wolves, there's a big pack on that side. And when my brother Butch was coming out, he was carrying two deer, he was a young man. He'd cut a little bit of the deer off to feed the wolves as he came out. And he'd speak to them. He says I didn't mean to take too much, but my family's hungry. There was 14 of us in our household. And when Butch went hunting, my father would buy him a box of 30-30 shells and my brother wouldn't miss one shot. We ate well because of the Bostwick area, on the results of subsistence and the way of life. My children are eating salmon tonight and ooligans tonight. That's our way of life, that's who we are.

I was up in Anchorage a few years ago during AFN, and had this Yup'ik Chief go to a forum one night on subsistence, he couldn't speak any English - his grandson was speaking for him.

The gentleman got up to speak; his grandson translated for him. So after this went on for a couple of hours, they asked the older gentleman to make the closing statements. The Yup'ik Chief. He got up to the mike and these are the words that he used. "I have a house, and you have a house, I don't come into your house and change the rules. why do you come into mine?" That's all he said, simple. Real simple words. Not to offend anyone in any way, my intentions are good. But my heart cries out for my children and grandchildren. What's going to happen to them if we continue to go on this pattern? We've met before with the Forest Service about other issues and I'm grateful for that agreements we came to in the past. But the past is the past; we're talking about now, this future now, 2001. Thank you.

MR. SALLEE: Well, I'm sorry that I won't be able to hold a candle to that last testimony. I'm very impressed with Willie's speaking abilities. My name is Mike Sallee, I was born in Ketchikan. I've lived for quite a number of years on Gravina

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Island. We lived at the north end of the airport for somewhere around a decade when we were leasing the property there from the pulp mill. They had it as a log storage area and they weren't that interested in the uplands. But there was a house, and there was nice garden there, and we lived there for, like I say, about a decade, and used the garden and the house, and the boathouse and the outbuildings. It was there that I did a lot of hunting when I was a teenager.

Deer had a rather elevated status in our family, because they did provide us with food. When my mother came up here during the Depression, she was very impressed with this area, and that you could basically get by here by growing a garden and getting deer and fish, and pretty much living off the land. And there was just a lot of -- she had a lot of respect for the area. On the other hand, when it came to mink and hawks, she had a different attitude about those when they got after our chickens.

We also have a homestead on the north end of Gravina on Vallenar Point and sometimes it's a little confusing, people think that Vallenar Point is way on the other side. There's a south Vallenar Point on the other side, on the west side of Gravina, and Vallenar Bay is on that west side also. Vallenar Point is the extreme west end of Gravina Island. And we homesteaded, or started homesteading that in 1956, and got the patent in about -- in the early '60s. And that is where my mother pretty much lived out the rest of her life. In fact when she -- she died at about age 70 or 71 I think it was, and she had gotten a deer the year before that, so she was still hunting up to within a year of the day she died.

I've taken black bear from Gravina, I believe I heard Dave Person, the wolf biologist say there were - it was under 10 I think - he might have said five wolves on Gravina, and it might have been nine. But there is a small wolf pack on Gravina, according to Dave.

I am also very much tied in with the use of our resources. My mother was involved with an accident, a car accident, when I was still going to school and she had her neck broken. Had to wear a brace for a long time, and she couldn't work as well she used to be able to, and she ended up working at odd jobs. And ultimately when my brother got old enough to work, why, he went and worked in the logging camp at Hollis, and he pretty much supported the family, and that was off of the timber industry. And then eventually, when I was old enough to go out and work, I worked on a fish packer, and worked for many years on boat called the CHRISTIAN here in Ketchikan.

I would like to read a couple of things that my brother has written. He wrote these in 1993. He says, I was -- am a born and raised lifelong resident of Alaska, so long that I have been out of the country less than 10 times during my almost 52 years of living here. It was all here. A man didn't need hundreds of thousands of dollars of investment like you do today to get a start. Many a kid started with little more than a patched-up wooden cannery skiff and homemade hand gurdy, and built that into whatever he wanted. There was no limited entry, no discriminatory IFQs, nor the need to buy a permit ranging from \$15,000 to \$300,000 just to gain entry into making a living fishing. There were trees everywhere - you could get into logging with nothing more than the promise of a market, a few simple tools, a pair of caulk shoes, and grubstake from the mercantile store. It didn't take an act of Congress for an individual to get a timber sale and millions of dollars didn't have to be spent deciding how you're going to log it. And this happens to be a seven-page letter to Senator Stevens, which I will not burden you with the whole thing. I just want to take some excerpts out of it.

When I was 16 and other kids were riding around in their customized cars, chasing girls and generally getting into mischief I was out in this old slab of a boat, with a four horsepower Wisconsin engine, with my chain saw, a peavey, a jack, and my little winch, getting logs off the beach, and taking them in to Totem Lumber Company, a small two-man sawmill, who gave me \$30 a thousand for them and the story goes from there. I worked in the woods for over 26 years before I ever did anything else and it was like a fish being out of water. For me there is no other thing to do. My attitude when I was young working in the woods was just like every other logger's. In 1959, when I got out of high school and into the woods, the Ketchikan Pulp Company had only been cutting timber in Southeast for about 6 years. It was pretty much wide open and what we know about the forest and the environment we didn't know then. There seemed to be enough timber for everybody. Nobody bid on anybody else's show because there was lots to be found everywhere else. Everybody believed the renewable resource, sustained yield propaganda handed out by the Forest Service and the industry. There had been no Native land selections yet either, nor any rubber-stamped wilderness areas and national monuments. Down below they had tree farms. Already there were areas that were being logged for the third time. I didn't see the significance then because there was so much old growth in the Northwest as well this huge land of Alaska, a tree farm sounded like a good idea. But they were private timber owners, little game and of course everybody knew that second-growth timber was vastly inferior to old growth.

Back then there were a lot of things we didn't take into account, and from what I've observed we're still very reluctant to address these issues, or even admit they're issues. Logging pressure on the forest has tripled over -- or more since I started in

1960, and then we have the helicopters, six to 1,200 logs per shift, depending on terrain and how far they have to fly to make a cycle. It's incredible.

I would like to read a couple of excerpts from some studies done on deer. These were done -- numerous people who have done studies on deer here in Southeast Alaska, some of this that I am reading from came from John Shane (ph) and Matt Kershaw (ph).

"When old growth is clearcut, the ecological relationships on the site changes dramatically. Following clearcutting in Southeast Alaska, herbs and shrubs grow abundantly and spruce and hemlock seedlings become established. After 15 years saplings dominate the site, competing with other plants for sunlight. By 20 to 25 years, young trees have shaded out most other plants. For another century or more the environment within the dark even-age second-growth forest remains unproductive for many other plants and animals. Although timber production is high in second growth, species richness -- that is, the number of different plant and animal species -- is low, because it takes centuries to develop the ecological characteristics of old-growth stands that are clearcut 1 to 100 years will never again regain the unique characteristics of old growth."

And he goes on to say in Southwest Alaska the situation is different in -- compared to the Lower 48 and the Pacific Northwest. Here, winter snow accumulation and the availability of high-quality winter range are the most important factors influencing deer populations. Regardless of snow conditions, however, deer forage, and virtually nonexistent -- deer forage is virtually nonexistent in even-age second-growth stands. In the next 100 years, if timber harvest proceeds as scheduled, deer populations throughout Southeast Alaska will be substantially reduced, along with hunting and viewing opportunities.

There's one little sentence here towards the end -- he says that sport hunting can be effectively managed. That's sport hunting; there are other kinds of hunting that is done as well, which also include illegal hunting, which is a little more difficult to manage.

Short rotation age results in a major reduction of heart rot in second-growth stands, since conifers less than 100 years old remain -- contain little decay. These are just little excerpts out of here. In Southeast Alaska -- okay, that doesn't apply. We don't have any mountain goats on Gravina. Okay. Considering the recent initiation of major research and limited data on the function and processes within old-growth ecosystems, it is imperative that the remaining old-growth forest be managed conservatively. And I think that's all I'll quote out of there. I think I can -- well, the Forest Service I'm sure has these copies of this -- these reports anyway.

I think my position on Gravina Island, being a sawmill operator and being a user of resources, I don't mind seeing a few trees cut here and there. I have written in the past, and I still think that there should be no roading on Gravina, there should be no clearcutting on Gravina. If you want to take a few trees out there, with selective cuts, or very small harvests, less than a couple of acres in size, I don't have a problem with that. I think there's not an alternative that matches what I would like to see on Gravina. I think that's about all I have. Given the choices that I have, it would be No Action.

MS. CHURCHILL: In introducing myself, my name is Holly Churchill-Burns, and I reside here in Ketchikan at 1042 Woodland. I was one of the few members that started working on the subsistence portion of these alternatives. Up to the time that we -- and I say we, I'll remember -- I'm just doing it by memory, Willie Jackson, Richard Jackson was here at the time, Merle Hawkins, Elmer Makua and myself in the earliest part of looking over these alternatives. We were trying to see what would be best in the subsistence way of lifestyle that would -- that we could go along with, with timber being removed. After looking at Alternative 4, which was at the time, the only other -- became Alternative 4, it was talking about placing a road all the way into the stomach of Bostwick. And Bostwick is a sensitive area to all of Alaskans. Pioneer Alaskans, Native Alaskans, people that just arrived here, and enjoy our fruits of the land and sea. And we saw that having a road come through that Alternative 3 -- or 4 suggests would not be to the benefit of our -- the Bostwick area. Because the road came right to the mouth of it -- or the most inner side of it and it gave us great concern because the recreational part of that portion of Alternative 3, with the cutbacks of the federal funds showed no policing to guarantee that this area was going to be protected by recreational people, even within our own people, that would be able to make use of the new road that brings us to the mouth so that we could gather our goods of eekles and elams and seaweeds, and hunt it, it would be all very nice and accessible for us.

But the concern of -- with the federal dollars being cut back, it came apparent that there would be no policing or upgrading or care that -- to the -- our likings. To what we thought would be necessary for -- environmentally safe. So we started working on this subsistence, which we all were pretty hopeful for, but as we started talking and determining what would be happening, it became apparent, and I can only speak for myself, that Alternative 3, which is a subsistence, which was the one that I supported was not the best alternative. The best alternative for protecting those rights of mine, and my family after me,

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is No Action.

And that's what I'd like to have said by myself, but I'd also like to make it clear that I believe that we all have you know, as citizens of Alaskans that we all need to be protective of each other's rights. That I have read only about the huge Haida canoes, that used go up and down these channels. And these huge Haida canoes are old growth, they're our grandfathers that have been here long before us and without us interfering will be long here after us. And almost in the 40s and in the 50s, certainly in the early part of the 60s, our culture was almost to a close. In all the books that you read that was writing about Tlingit, Haidas, and Tsimshians, they always referred to us as it once was, long ago, or before the white man came, and I'd like to be able to read, for my children to read, to say that there's still an old growth there possible to take for the growth of the culture, so that they have the access to it, to make a canoe and so I just hope that you guys consider No Action and I thank you for your -- listening to me.

MR. MAKUA: We're late here, and poor eyes here, (Native language spoken). I'd like to thank Merle for making this meeting possible by asking the question of the Forest Service, to consider Ketchikan KIC as a subsistence testimony. And I want to thank Holly and the other speakers that came up, Willic, for expressing their thoughts, and Mike, I left while you were speaking, excuse me. And I if I cover anything that someone has touched it's because there's concern. I needed to run back to the office and grab some more paperwork that I had prepared, because the comment period, there's a date set, and it's been pushed back, it's been pushed back and there's litigation in courts about the Forest Service's actions, and lack of consideration in the last Tongass Land Management Plan.

But let's get to the issue at hand. Gravina Island lies to the west of Ketchikan on - I always have a hard time with this name - Revillagigedo Island and north of Metlakatla on Annette Island. At 61,404, it is moderate in size compared to other islands in Southeast Alaska. Yet to the people of Ketchikan, Metlakatla, Saxman it represents a diverse pallet of cultural, economic and recreational opportunities. For some people it is a place of subsistence. On Gravina Island, at the head of Vallenar Bay there were Tongass Wolf Clan smokehouses. At Bostwick Inlet, there was a large summer village that was used by the Tongass for drying fish and meat, and gathering berries. It's referred to in the Goldschmidt and Haas 1946, page 142. Maybe you heard in the earlier testimony of the stories of the usage of the island by the ancestors before us. It's referred to in this book that the forestry uses. Saxman Village, only 2-1/2 miles south of Ketchikan, was founded in 1894 by the Cape Fox Natives. Apparently at one time, George and Thorne Arms, of Carroll Inlet, and the Tongass Narrows area were a portion of the Saxman territory. Though this area is now claimed by the Tongass people and their right is recognized by the Saxman people, both groups actually use the area for hunting and fishing at the present time. Stated in Goldschmidt and Haas. These are direct quotes from some of the proven works of Goldschmidt and Haas, which is used in many of the Forest Services EISs. I can only try to describe an important force at work within the Tongass, the Tlingit and Haidas and more recently Tsimshian Indians, Natives, have a relationship with the forest and sea, that has formed over the millennia. This relationship continues today, and is the heart of many of the laws governing the Tongass, at the center of the Native customary and traditional way of life, our land and concept of subsistence.

It is important to understand that subsistence is a non-Native word. It does not capture the traditional way of life. The word subsistence suggests poverty or bare survival while the experience for Alaska Natives is a rich, vital, and fulfilling way of life. For our discussion however, I will use the term subsistence, since it is part of the vocabulary necessary to follow the contemporary politics and law surrounding the Tongass. Subsistence is also the word used to describe the spirit and harvest of the other Native and non-Native residents of Southeast Alaska. It is plain to see that Gravina, from the time immemorial, has been a place of gathering and, as mentioned above, subsistence still plays a role at present time. A traditional subsistence life in Southeast Alaska forms a deep web of connections between people and land, the sea, the wildlife, and the spirit. Customary and traditional foods are essential to the physical health of Southeast Alaska Natives. And changes away from the traditional diet are believed to contribute to diabetes, heart disease, obesity, and cancer, and on, and on, and on.

Gravina is well known for its black seaweed, but don't tell anyone, and has that special ecosystem to support its growth. The seaweed is a traditional source of protein and acts as a natural cleanser for the elderly intestinal tract. In Southeast Alaska relying on subsistence foods for a subsistence part of one's diet is a matter not only of choice but also on necessity. A number of factors, including great distances from other food sources, and a compromise position in the cash economy combined to make Native communities physically and economically dependant on traditional subsistence resources. That brings to mind the accumulative impacts from all the recent timber sales in the area. The Cholmondeley timber sale, the Slide Ridge timber sale, The Licking Creek timber sale that are all inventoried roadless areas. This is more pressure on the resources and availability to the resources. Bostwick Cove on Gravina Island has designation of environmentally sensitive area, by the State of Alaska. Refer to your Central Southern Southeast Area Plan, by DNR, KT32, which refers to the marine life - a very complex ecosystem that is very sensitive. By their own statements and documentation it's clear this is a very special place, not only to Natives but also for the children to have a place for the young harvesters to learn by personal

observation and hands-on activity all they can about geography, weather, hunting and how to preserve and process the foods they harvest. Subsistence living is not only a distinct way of life, it also a life-enriching process. Conservation and perpetuation of subsistence resources is part of the traditional subsistence way of life. And is mandated in traditional law and custom.

Furthermore, all things, including animals, fish, trees, glaciers and the sea itself possess a powerful spirit and are to be treated with great respect. The traditional subsistence way of life makes it evident that the subsistence life is much more than putting food on the table. The Native law in Alaska is quoted: The ability of Alaska Natives to engage in a subsistence life is a measure of their self-determination. I know that this is a testimony on subsistence. And in the opening we tried to cover as many as the alternatives as we can and I'd like to thank Susan Marthaller for doing that. I was hoping that there would be a period in there for more questions. There's still are a lot of questions that need to be asked, as you see the question marks up there. I can't see them from here. What do you believe about your own -- how do you feel about your.....

UNIDENTIFIED VOICE: That's social services.....

MR. MAKUA:oh social -- close, close, but a lot of questions. But I have a lot of questions still, that's why I was hoping there'd be more time for it. When we think of subsistence, yes, that's a consideration, but the purpose and need they use in the EIS, the Environmental Impact Survey. They say access and recreation and for economic development. These are all good things. But have we thoroughly thought it through? As it was pointed out, and we know that it's in the EIS, the cultural and sacred sites. There's burial grounds there. There's registered historical archaeological sites. How are they going to be protected when this access and recreation proceeds? Never mind about cutting the trees down and ruining the rivers and ruining the streams and ruining the bay, changing that whole ecosystem. What happens when the access and the recreation starts? I haven't seen in this EIS any plan. There's a mention of recreation; you would think there would be a plan in the EIS - where these trails are going, where the motorcycles are going to be, where the four wheelers are going to be, where the parking lots are going to be, where the restrooms are going to be, where the boat ramp's going to be. How the guard rails are going to protect these bridges. There's no plan. I asked that at the last meeting. There's no plan. They don't have no funding.

So I hope we have more time for questions because there is a date on the comment period, the end of the comment period. We've been fortunate that they're up there fighting, for the lack of consideration. I want to thank all of you for taking the time to be here this evening, to hear some sometimes harsh words. But we're all been working on this. And I thank Susan and the Forest Service for looking at all the alternatives and giving us a chance to be heard. (Native language spoken.)

MR. ARRIOLA: My name's Norman Arriola, I'm with the Tsimshian Nation, born and raised here, no desire to leave. I haven't had much time to go through all the propaganda on this logging on Gravina, but to start off, right off the bat, I don't think that island should be touched. And for the young lady that showed the map area, the different alternatives, the only alternative that I can see, that that island should stay as is. Any time you bring in logging, and if they -- even if they helicopter logged that, you talk about barging, putting barges in the Bostwick Inlet. And any time you disturb the water you disturb the sea life, everybody knows that. There's always that chance of an oil spill. There's always that chance of logs sinking to the bottom, resting the ocean bed. Subsistence is a way of life for the Native people, it always has been, always will be. No matter how much the earth is disturbed through logging. That area is very rich in what we live off the land, the seaweed, the herring roe.

The question in the back of my mind is what's going to happen to the wildlife, especially the deer. I've got two teenage boys right now that I'm going to teach how to hunt this summer. I haven't had the time to teach them in the last several years, but they're at that age now where they want their own rifles so they can go hunting. So I'm going to take that opportunity this summer, because I hunt -- I have been hunting over there, for the last 40 years. And I get my limit. It's not enough to feed the family all winter long. But it's just that, being able to get on the ferry, or just over in a skiff, beach the skiff, and go over there for a couple of hours and get maybe just one deer. And like I say, any time you start logging an area off, the wildlife move on, because you're disturbing their home life. So I don't know how far this is going to go as far as public speaking goes, but I would hope that this roadless issue that's in litigation now through the court systems will stand as is. There's other ways of logging, like I say, they can helicopter log. It might be expensive, but if they want to stay in that business, I think that's the way they ought to go - just helicopter log.

But I'd just as soon see that island be undisturbed. We don't need any roads over there. There's plenty of foot trails and if you ever had that opportunity of going over there, it only takes about 15 minutes to get out of the thick brush, and get into the muskeg areas and walk from Vallenar, clear down to Judy Hill in the back end of Bostwick, very beautiful, especially during the summer months, and even when it gets its first coat of snowfall. That's when it's easiest to get the deer. But I enjoy a

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challenge when I go over there to hunt, because I spend about 12 hours of hunting over there if I have to, I even spend the nights over there. It's quiet after the jets have already flown over, and headed north or south. It's a beautiful area. So I'd hope that the Forest Service would consider looking for opening up logging elsewhere other than -- other than Gravina. Thank you for your time.

MR. SANDERSON: First of all, I'd like to thank the people for coming in. My name's Robert Sanderson, Jr. I was born and raised in Hydaburg. I was born here and raised in Hydaburg, okay. You know, when we go to the stores, right, okay. A lot of people go look for red meat right, you know, never aten [sic] red meat bought from a store growing up, ever, ever. They used to laugh at us if we buy tuna, you know. Everything was put up at the house, salmon, even the greens that grow out on the -- along the island shores and what-not, goosetongue, wild asparagus. We have a couple of places over there on Prince of Wales Island. Saltery is one place and there's another place on Sukkwan Island where they have a log transfer, and Saltery, we -- used to be one of the best cockle banks and clam banks around Prince -- around Hydaburg. Can you guys hear me okay? And as far as the log transfer facility goes I've spent probably about 15 years longshoring over there too, and Saltery used to be one of the best places to get Dungeness crab -- and you can't -- nobody can tell me that a log transfer facility wouldn't hurt nothing. That's bull. It does. We can't even get crabs in that place anymore. They're gone. Nothing. Saltery Creek used to be one of the best silver producing rivers in southern Southeastern Alaska. As far as I know, I don't know much about buffer zones or this and that, but they logged a lot of that on both sides -- on one side of the Saltery River now, and there's really nothing coming back to that river there anymore, you know.

As far as the roads go over on Prince of Wales Island, all these old logging roads, they take numbers of deer down big time. You know, even if they're closed off, people get their motorbikes and they get around there. And I know some people that go on these roads and take 15, 20 deer within a week's time, you know, I don't know when enough's enough is. Excuse me, I'm getting kind of tongue tied here. But we used to -- you know, I grew up in Hydaburg, on the beach. If we needed cockles or clams, all I had to was get my clam gun, and grab a bucket, take me 2 minutes to get to the cockle or clam banks down there. Another 10 minute boat ride, we'd be getting -- we'd be going down to get goosetongue, I don't know how many of you ever ate that, wild asparagus, which is good stuff. But as far as the dinner table ever went, we never used to have red meat, or cow meat, what I missed, but cow meat, we never -- but we had gardens you know, of potatoes, and rutabagas and stuff like that then. Everything revolved around our subsistence way of living. Halibut fishing, you know, salmon, heck - you name it. You know, we have an old saying back home in Hydaburg, all we needed was bottle of soy sauce and some rice and you're good because everything else went with it, you know.

So, anyway, as far as Bostwick goes, I believe that's a gem. And that's the closest place around Ketchikan that I know of that you can actually go out and get Dungeness crab and goosetongue, or you know, wild asparagus, and to have a log transfer facility there, I'd guarantee you it would have some kind of effect, a negative effect on that area.

And as far as Gravina Island goes, that's a beautiful island. Flying over from Hydaburg, a lot times, when you go between the passes there, it's absolutely gorgeous, that whole valley. I kind of hate to see that go, you know. And I know we're not going to get what we always want, you know, but we got to find some kind of balance in there.

So anyway, as far as I'm concerned, you know, No Action. So, anyway, I really don't have much more to say on this issue. I know a lot of people are going to go around and round on it. We can talk forever on it, you know, but I felt it was important for me to come up here and talk to a lot of you people. I don't even know most of the people. But, as far as subsistence goes, that's how we all grew up over there, you know. Used to get a mail boat in -- our grocery boat in once a month over there growing up. So, anyway I'd like to take this time to thank you guys for letting me share about this topic, so thank you.

MR. WINTER: I'm for No Action, and I'm for No Action for several reasons. My first reasons is that I agree with my brothers Willie and Kai, and my sister Holly. It is a traditional living, it is a subsistence area, it is a way of life area. And I think it's very important that the Forest Service, the State, begin to respect these areas and the original people of the first nations of Alaska.

I'm also concerned because all around the world we've got corporations coming through and a terrible imbalance is occurring. It's exterminating indigenous peoples. And it's placing a great hardship on all the people who feed their families by getting a job, by having to work. The imbalance is going to kill us, we're not going to have grandchildren if don't watch out. I think this respect is very important. When I talk about economic feasibility in the earlier meetings I was there too, along with Willie and Kai and others. And I said well what do you mean economic feasibility? Why aren't you concerned about how many local jobs are being produced? What kind of wages, what kind of working conditions. Do people have union rights? And of course this wasn't understood. It wasn't understood because it came from a working person's point of view, not an investor's point of view. And for this whole area I see no guarantee that the logs will be used locally, rather than

shipped out. No guarantee that the jobs will provide living wages. And so far the smaller loggers, people who cut a few logs a week, and those mills and so forth, they're not really cut into these kind of deals. The small loggers have been left out for a long time. The kind of things that could be in balance with the earth, in balance with the people, in balance with cultures. And I see no reason to do any more logging at this point. We've seen every businessman in town go for a little welfare because Gateway Forest Products is in such trouble. But where's the things for ordinary working people, where's the things for the Native people, where's the things for the whole community? You know, until we can do these things in a balanced way, and stay away from some areas that are sacred. That are part of somebody's heritage, somebody's culture. Until we can do things right, make sure they're done right, let's not do it. So I'm for No Action. And there's a big cross section of people, Native and non-Native, that feel this way. I'm only one but there's lots of us. Thank you.

MS. BURR: Hi. My name is Terri Burr, I'm Tsimshian-Irish, and I was born in Wrangell, raised here in Ketchikan and my grandfather did work at the Peter Simpson sawmill on Gravina a long time ago. And they -- their first child -- my grandparents' first child was born over there, and passed away over there. So I know I have a family member there. I have a couple of different points I want to make about this -- about this proposal.

The first thing for me on a practical point is that our Native American community here in Ketchikan which comprises, what, about 30 percent of our local population. A lot of the people are poor. Their annual income is below the -- below the norm, and a lot of us don't have big boats to go far away to hunt and fish and gather -- you know, gather medicine, and for those of who do have boats, most of us have small boats and it just isn't safe to go very far away from Ketchikan. And so it's always been convenient for us to just run across the bay and it's safe. It's safe to do that. I grew up listening to stories of people going hunting for the first time, of great camping trips, and people coming back and coming back with a lot of -- a lot of crab, a lot of Dungeness crab. I also grew up going over with my uncle to Blank Inlet, to Blank Rocks to get seaweed and have fond memories of doing that.

So, along the lines of there being burial sites, I know personally in my own family that -- you know, that we have a relative over there. About the -- somebody referred to the sawmill as a Tsimshian sawmill, because it was owned by Peter Simpson a long time ago. This is true, it burnt down and there was a law at that time that minorities could not rebuild. He wanted to and he could have. He could have paid to have the sawmill rebuilt, but there was a law actually against it. So he couldn't, and that was when my grandparents moved to Ketchikan. And they had a tent. They pitched a tent at the place where Talbot's is today, on the beach there, before they moved to Indian town. Another point I want to make is about the deer population. I do know, we all -- you know, we're surrounded this is the -- Southeast Alaska is a -- lumber and the timber industry is a big part of the economy in Southeast Alaska, and so we have -- over the years we have all learned a lot about logging, and one thing that I've been able to see firsthand is the effect that logging has on the deer population. I was able -- I worked with the Forest Service long ago, I worked on a survey crew and we surveyed P-line road for timber -- for timber -- future timber units and so we got to see what the land was like and what the wildlife was like before the logging companies came in, built roads, and logged it. And it was kind of neat because we kept tallies on the number of deer and bear we seen every morning, going into -- going in to survey and so I did see, after the roads were put in, that we couldn't find the deer, we couldn't find the bear. And we did hear all the gunshots, we did hear all the rifle shots. And we knew that a lot of people working for these roadbuilding and logging companies, you know, had -- had meat. And we seen a lot of -- also a lot wounded deer, but it was pretty surprising to see. Because I like deer meat too, and I like to hunt. But it was shocking to see almost all of it gone, just a few days after the logging, I mean the roadbuilding started. And so I seen that firsthand. And I know that this is something that is certainly going to happen on Gravina.

Now again because the local Native population, because our annual income is pretty low, and having the ability to go over there and hunt, this will effect -- this will effect our lifestyle. Because the population, the deer population won't be there. And eventually there won't be any reason to hunt over there if there aren't any deer, and eventually there won't be hunting or subsisting at least for deer meat.

Another thing I wanted to make a point about is the value of the timber that is going to be taken out. I think about the value of a basket that is woven today, and if the trees aren't cut over there, what is the cost say for the next 50 years, what is the value of all of the baskets that can be made from the bark, from the cedar bark on that island. And how can you equal that to the value of the pulp, or whatever the -- what is going to be used for. And I think that the value of the baskets and the quality of lifestyle and the fact that Native people will continue to practice our heritage, that that is priceless. And once you cut the timber over there, it's going to be a very, very long time to get that back. And that's something that I think it's irreplaceable.

I am wondering, in regards to the question period, I did see on your map that you did, you folks did push back the boundary, I'll just call it on the southern end, that's closer to Bostwick. You did -- you did push -- pull it back a little bit, but I'm wondering if it's possible to even pull that back further. Now, I think of that because I think of the families who go hunting

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and camping over there and the noise. And the noise level and the activity level and that they have enough space from -- from those roads and all of the activity around -- around the logging.

Let me see -- one last thing -- a point I wanted to make is that Willie, you were talking about the land being sick, or the land being hurt. And this is the year 2001, and Native people have come a long ways. And I think that we have lost sight of our traditional values and our traditional heritage, and some of us have -- have some of it still and what we're talking about is not having access to subsistence and how that affects our heritage and our cultural traditions. A lot of us want to believe that we're living in the modern age, and we have no longer any ties to -- to our past. But there is -- there is a lot of spirituality that is part of subsistence and it's still there, it's not gone yet. But as we cut everything and come away and don't practice our traditional -- our traditional activities, like subsistence and gathering -- gathering medicine, even fishing for our families, we lose that also. So I just wanted to make that point about -- in regards to cultural oppression. Thank you.

MS. HAWKINS: Good evening. Thank everybody for coming tonight. Yeah, I'm the chair of the subsistence committee for KIC. So we take -- there's three on the committee. Rob Sanderson and Butch Fields are also on the committee. We take all the comments from the Tribal members and come up with a decision on the, this Draft EIS for the Gravina Timber Sale, and from what I've heard so far it would have to be the No-action Alternative for Gravina. I also heard from Tribal members that aren't present, but I've talked to in the past about it. Allan Almquist and Robert Almquist, and they were for the No-action Alternative, because they're fisherman and they have a lot of experience with timber and the harm it can do to the land.

And also I wanted to read some of these comments. The roadless issue, I keep hoping that that will kick into action and then it will kind of eliminate having to protect Gravina. Because if the roadless is implemented and then they wouldn't be able to build roads on Gravina or log, so this -- these comments are about Gravina Island.

Historically and currently it is still used by Alaska Native people from the Ketchikan area for subsistence fishing, gathering, and hunting. The Saxman people use it extensively and they have rural subsistence status.

This is the traditional land of the Tongass Tribe and although they are not federally recognized as an IRA tribe, I represent them as a Tribal council member. A respected Tongass Tribal leader, Esther Shea, said during the March 2000 traditional ecological knowledge conference, co-hosted by KIC and the Forest Service, she said we may not own the land anymore, but in our hearts it is ours. And her words are forever etched in my heart and I'll never forget that.

The Forest Service is proposing a timber sale on Gravina Island, with a proposal for road building and several alternatives. KIC opposes any road building on Gravina Island public lands. I recently met with other landholders of Gravina, Department of Natural Resources, Forest Service, Ketchikan Gateway Borough, Fish and Wildlife and the Mental Health Trust has land over there and the university and some of the things we talked about. We're concerned if that if roads are built on Gravina, that the State Department of Natural Resources will again reopen the roads and clearcut all of their land. Because on some of these alternatives, the road would have to go through different landholders' parcels, thus giving them that opportunity to log all of their land. They had different regulations and in the past they have done exactly that. They have a certain amount of timber they can harvest in one year - they might do it all in one site, which is the most economical for them. So that's a major concern.

The Forest Service would also like to open the lands up for recreational use. They cannot afford to maintain the roads they have now, let alone assume the maintenance burden of additional roads. All of the proposed or possible activities would jeopardize the subsistence areas on Gravina, especially Bostwick Inlet. Gravina Island is a pristine environment and needs to be protected from roadbuilding, timber harvesting, recreation, or other activities that would alter its current roadless characteristics. Gravina Island has been used by many generations of Alaska Natives - Tlingit, Haida and Tsimshian - for traditional hunting, fishing and food gathering. KIC would like to see this area available for future generations. These subsistence gathering activities provide significant social and ecological values. There are a lot of archeological evidence on Gravina which shows how important this area was and still is. Any road construction would jeopardize these values.

So that was -- and then in the Draft EIS, I made a few comments. I recommend anybody pick up one of these from the Forest Service and read it and comment specifically on items in this. And the deadline for that is June 26th, I believe. It says on page one, paragraph one, of the Draft EIS, a letter from Thomas Puchlerz, his statement that his preferred Alternative 4 emphasizes positive economic and recreational access on Gravina Island. I disagree with his statement that Alternative 4, while it changes the subsistence use, still maintains the resources for subsistence users. On page 2-7, and 2-8, of the Draft EIS, under the ANILCA heading, Mr. Puchlerz's statement is contradictory, as it states that due to the open road system proposed for Alternative 4 there is a possibility of a significant restriction on subsistence use of deer. This does not conform to the requirements of ANILCA. ANILCA was passed in 1980 to ensure that public lands in Alaska, including the Tongass, are utilized in a way that causes the least adverse impact possible on rural residents who depend on subsistence uses of the

resources. Harvest of deer are currently near maximum sustainable levels for much of Southeast Alaska. Further declines in habitat will lead to a shortage of deer and increased conflict among users. Gravina Island's average annual harvest of Sitka blacktail deer by wildlife analysis area, 1987 to 1996, shows that Gravina Island harvest level at 100 to 200 deer harvested annually. Our Tribal members depend on this food to sustain them and their families. On page S-2, purpose and need for action, the land use designations for Gravina land under the Forest Plan, are timber production, scenic view shed and old-growth reserves. Unfortunately timber -- unfortunately subsistence is not a land use designation and it should be. Economics, recreational access, and subsistence are some of the land use designations for Gravina Island. I believe the island is too small to maintain all of these multiple use -- uses, which are not at all compatible. The only land use designation that makes any sense is the old-growth reserve, which protects the old-growth forest. Alaska Native traditions, spiritual health, and cultural considerations, are directly related to subsistence issues and uses. For this reason, KIC Tribal Council would like to see the Bostwick area left undeveloped, as any log transfer facility would have a major detrimental impact. We do not want a log transfer facility, barge drop, or logging road in the Bostwick area. Common goal is to share with all groups, is to protect the resources in our area. A balanced approach for the use of natural resources will benefit all people now and for generations to come. Our Tribal members rely on the abundance of natural environment for food, cultural and traditional values, livelihood and quality of life. Healthy populations of fish and wildlife represent natural wealth that, if conserved, will continue to provide for generations to come. In addition, subsistence and traditional use remains a major element of community, economic and cultural life, therefore the conservation of forests and stream habitats essential to protecting our future.

Because Gravina Island is so easily accessible to Ketchikan residents, it is used extensively for hunting, fishing, gathering and harvesting of a wide variety of plants, fish and animals which depend upon healthy marine and terrestrial ecosystems. Some of these include salmon, marine mammals, marine invertebrates, birds, deer, other fish, plants, and other land mammals. This is a partial list of some of the resources utilized by Alaska Natives and others: crab, cockles, butter clams, littleneck clams, black bear, beach asparagus, goosetongue, wild rhubarb, fiddlehead ferns, blueberries, huckleberries, low bush cranberries, bog cranberries, grey currants, and many varieties of seaweeds. These subsistence gathering and collecting of plants and berries involves many spiritual attributes, teaches family values, family history, clan history, traditional clan land uses and ownership of areas, respect for the land, respect for the elders, geography. Caring for and teaching younger children and many other values that cannot be taught any other way. There are ceremonies involved with subsistence such as the sharing of food, the rights of the first hunt and distribution of food to elders and family. The gathering and processing of plants, berries and other natural resources usually involves multiple generations of family, relatives, such as grandmother, mother, sisters, brothers, cousins and grandchildren. The letter of March 5th from Jerry Ingersoll states that the Forest Service lists Alternative 3 also as a preferred alternative along with Alternative 4.

Alternative 3 makes a good attempt to protect Bostwick Inlet by closing the road and not having a log transfer facility in the Inlet, but possibly having a log transfer -- barge log transfer facility. During the interdisciplinary meeting with the Forest Service they invited the KIC Tribal members to participate with the staff of the Forest Service to discuss the layout of the proposed timber sale on Gravina Island. This was a first for everyone involved and was very productive and helpful to the Tribe. People involved from the Tribe were Elmer Makua, Willie Jackson, Holly Churchill and Merle Hawkins. Being involved in this early stage of the process was helpful for both sides, so that we could all work together to come up with a workable plan for the proposed timber harvest on Gravina.

Alternative 3 closes the road system and avoids Bostwick in order to provide better protection for subsistence users, as a direct result of this process with the Tribes and the Forest Service working together and listening to one another. During this process of learning everything we can about Gravina Island proposed timber sale, myself and other subsistence committee members have consulted with Tribal elders to find out the best way to deal with this issue. We have consistently been told to look for balance in any resource issue. Granted, Alternative 3 does this. From what I've been hearing from my Tribal members, they wish to push for the No- action Alternative and I'd have to listen to that.

So some other effects that really haven't been discussed were the cumulative effect of the other landholders on Gravina - Department of Natural Resources, Mental Health, the university and also the possibility of the bridge going over to Gravina, the Gravina access. For an island the size of Gravina, I think the only possible thing for me to do as a chair of the subsistence committee, would be to push for the No-action Alternative. On a recent trip to Craig, just to reiterate on the importance of subsistence food, I got to go visit a friend of mine that's very dear to me, and we ate herring eggs, several times; we ate geoduck, gumboots, clams, deer meat and salmon. I don't think we even made it to the salmon - that was like the last course, and I'd already had enough to eat, but I know for the people involved, the KIC Tribal council would have to push for the No-action Alternative and that's about the best we can do, thank you.

MR. WILLARD: Yeah. My name is Larry Willard, I live here in Ketchikan. Not like most of you guys that can say your

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ancestors have gathered food over there, my ancestors are from Hoonah and I can point out in places in Hoonah where my ancestors have gathered food, that we no longer can gather food, because the Forest Service has allowed the corporation to go ahead -- the corporation had allowed them to ahead there and log. And it had ruined our hunting, and I know what the bark in the water can do to poison out anything else that's around, crabs. And the silt that runs off in the water from the buffer zones, and the Forest Service, you know, they say well you have a certain amount of buffer zone, and if you go past that we'll fine you. Well they look at the buffer zones, say well there's three big trees there that'll pay for the fine, lets go ahead and log the rest of them. And it just -- it hurts the salmon run, and they have no way of controlling the land slides that'll go into the rivers. And that ruins the salmon beds. And as for me, I do hunt and fish and gather food along the south end and the north end of Gravina. I've gathered seaweed, deer, seal and salmon. And I haven't heard of any kind of impact of the traffic if they're going to barge the logs out of there, what the barges and the traffic will do for the migration route of the fish, or the seal that sit on the rocks nearby. How it will scare them away during their pupping seasons, and you know I can point out places in Hoonah, where I could tell my grand -- my kids, that this is where your grandfather used to get deer, we called it the butcher shop. You go 50 feet off the beach, there was a muskeg there, and it wasn't very wide, maybe less wider than this building, it was 3, 400 yards long and you couldn't walk the whole length of that muskeg without getting two or three deer. And then you got your deer and you went back to the boat and went home. They logged it off, there is no more deer in there. And for me I would hate to see them do that to this island down here. There's many, many people around here that use it for hunting and fishing and for recreation. And they -- like they said they don't have the money to police the log -- or roads they have now and they want to put more roads on this island. I think it will be detrimental and it will hurt. In the long run, I think it's better off to leave it the way it is for our kids, and our kids' kids. For your kids. For my kids, my great-grandkids. Let's leave it and see what will happen to it. Not log it, because we know what will happen when we log it, because they've logged everywhere else. Let's trade that place in for back of the white house, but then again we can't do that because there's no logs there. They took that many years ago. They never replanted it. Now they want to do this, they say oh well, we'll take care of it, we'll replant it. We know how good that works. At least I want some place that I could say this area over here -- my grandkids can say my grandfather hunted there. I can show you where he hunted. I can show where he gathered gumboots, where he dug clams, the clam beds are still good. The cockles and the cockle beds are still good. Sea asparagus, it still grows there, the bark and the runoff never killed it. The clams, the crab, the seaweed, you know, and from my standing is, I'd hate to see it logged. And if they are going to log it I wish they wouldn't put the logs in the water were we gather seafood. If they're going to build a road from this side, why not dump it in on this side by -- where they have a storage facility already. They're going to be putting log trucks on there anyway. Why not let's have more people police their buffers zones. Let's make an example, if they are going to cut trees there, let's make an example of how good we can do it. Let the whole community in on it. Not just the Forest Service to police it. Let's have KIC, have a lot of the other people look in on -- let's not fine them, let's shut them down if they cut past their buffer zones, let's increase the buffer zones. You know this is all -- this is a real hard thing to swallow, to see all this going to short-term profit and not the long-term lookout for what's going to happen.

And as for me, I do love to hunt and fish over there, we do gather clams and cockles, my kids and I. And I wouldn't want to see it logged. But if they are going to log it, I wouldn't want to see them dump the logs in Bostwick, let's have them dump it in on this side, where the pulp mill's already had the storage there for how many -- 50 years. And we know they've dumped logs in there and stored logs there. They've got a sawmill already, put the logs in the water, let's see them do it on this side. And let's keep it away from the shore on that side. And if they're going to build a road, let's have them demolish the road completely for no recreational use at all. Because we know what logging roads can do in a hunting area. It depletes the complete population of whatever's there. And they like to use the road and they just do a lot of road hunting, it's not -- we use that area for a lot of subsistence use, for a lot of the Natives around here. We do not hunt for one household, we hunt for the elders. As for myself, I can speak of maybe six, or seven families that I contribute to, that aren't even my families. So I'd like to see more studies being done, on how they're going to protect our land and our subsistence use of the area. I've gathered cedar bark, red and yellow, maidenhair fern, spruce root, all in this areas. I don't want to see it go away. It's close -- close to town, like most people say. Easy access; I'd like to see it protected. Thank you.

MR. ROTECKI: Hello, my name is -- hello, my name is Bill Rotecki, I live north of town here and I don't -- I don't usually like to speak publicly, so what I usually do, is I try to get early and get out. And I have to say that I am so thankful that that didn't happen, because when it doesn't happen I get to hear other people talk and I get to listen and thank you everyone for speaking. And thank you Forest Service for having this hearing, although I'm sure it's legally required. One of the first things I'd like to talk about is the LTF proposal. And in the EIS, under marine environment log transfer sites, related facilities, it says: Deep bays or coastlines or long straits or channels are preferred sites for LTFs first log storage, anchorages. These areas are preferred because deeper waters generally are less productive and stronger currents disperse bark and debris. And it also says a serious search was done to identify these areas. And only areas -- this is on page 3-33. Only areas that have the necessary physical characteristics were selected for detailed investigation. So then there's a map,

and I look at the map, and then I pull out my chart, and my chart shows depths of like 5 fathoms, I'm saying this is deep water, you know, I -- it made me quite upset when I looked at that and I saw that, and I know a lot of people that work for the Forest Service and this may be the best plan that we've ever seen come out of this area. And I respect the integrity of so many people that work on this, and that's wonderful, but, you know, I lose a little respect when I see that kind of stuff. I think that's nuts, you know, that anybody who thinks that there's going to be an LTF in Bostwick Bay and not have tremendous impact is just not -- I mean, a high school science class could do better than that, really. I find it quite upsetting that it's even suggested. If I have to say it, obviously I oppose it.

Here's another issue which I'd like to ask the Forest Service to review, which is, I see in here the different alternatives, I think this is in several -- many charts. But there is a chart right here on -- in Chapter 2, 2-16, where they show, under subsistence, percent reduction in deer habitat capability by alternative. Well, the preferred alternative is the highest percent reduction in deer habitat capability. But that wasn't what I was going to talk about. Now this is one entry, and it looks like they vary from 12, to 33 percent. So you know, maybe we're talking about the Forest Service is planning four entries for their proposal here. Now it doesn't say what they're really thinking, you know, is this 10 percent like the first year, or is this 10 percent due to this entry? Well -- or can we extrapolate, which I can't, because I don't have the data in here to extrapolate, and we could. The science is not -- the model is not that difficult. But does this mean that over the entire -- all of the -- because I believe they -- they -- Mike Sallee, read from these reports, and I know that the deer models that the Forest Service use are a consensus-based model that was arrived at with working with the Forest Service, Fish and Game, I presume Fish and Wildlife Service and all the people who are the experts on it, and they all agreed. I mean, it's not like Forest Service, said no we don't agree with this model. They all agreed on this model, right? And the model, as I understand it, says that once the canopy's closed, then it's not likely to be opened again and the value for deer habitat's going to be minimal. So does this mean that if, after we go through all four entries, we're going to have a -- let's see, I don't know, let's say seven or eight times four, 32 percent reduction in habitat? Is that what it means? I don't think it says anything in here, but I think it should say in here what it does mean. We should know what that means. If you want the public to comment responsibly on your document, you should tell us. You know, and if it does mean that, does that -- that seems to me that that definitely will, it's not just -- how do you say it -- and again, too, I'm a little upset, so I want to apologize to Susan and whoever Forest Service people are here, to not think that I am making a personal attack on your credibility and your sincerity, but we need to know what the results of this are going to be. I think it's probably even illegal to sequester out the effects of this document, of this particular action, without combining with to the other actions. You know, you can't say "oh okay, this is going to have a minimal effect" and then, you know, so many years later, do another thing, "oh that's going to have a minimal effect", and do it, you know, so many years later, "oh that's going to have a minimal effect". You can't do that and expect people to swallow it. You know, it's got to be an analysis that says what the whole effect's going to be. And if the whole effect is a 30 percent reduction, by God, it is going to have a likelihood of significant restriction on subsistence use. I mean -- I'm not even talking about the other uses, but subsistence use. So I think, you know, that needs to be addressed in this document.

I'm a forest user, and I've made a living logging, and I've made a living fishing and I say they're damn good jobs, and they're damn good industries and I believe that the world -- that's part of the world, is that we -- you know, look at this building here, you know, it was made out of stuff, and we harvested them, those things and I have no objection to that. I do think that sooner or later we'll learn. Even in the past few decades we've learned tremendously about how we can do a better job in forestry and fishing and all the other things we do, you know, in terms of unintentionally polluting air and water. We've learned a lot, and the skills in forestry are so far superior to what they used to be in the past, I think it's time to make that jump to what's coming. Sooner or later we will be doing things in a much better job, and I think it's time to make that jump now. I'd love to see it on a Gravina proposal. I'd love to see a Gravina proposal that logged at an incredibly small rate but continuously. And I think if we did the economics of that we'd find it would be far more valuable financially to this community and if it was done at a small enough rate I think the effects, would -- the negative effects would be minimal. I mean the reason of course it's not done, is because someone does an economic projection and they say "oh, that's not cost effective". Well that's baloney. The reason it's baloney is because our economics are baloney. The economics are not evaluating all the long-term effects, you know, they're not evaluating -- now how many totem poles would it take to equal, you know, one moderate size clearcut. Now if you could do one of those poles, I don't know how long it takes to carve a pole, but you know, if you did one a year and you could sustain that for 100 years. How many acres of clearcuts would that take. That's an extreme example, because there's a tremendous amount that goes into those and they're tremendously valuable and they should be. And I don't want to see mass-produced totem poles, you know, no one does. And it's not likely to happen, although I would say it is possible and another thing that ought to be in here, is it's possible, we don't know how much cedar's left around that makes good poles, carving poles. Does anybody have any idea, has the Forest Service ever studied to see if we're going to decimate that?

Does it -- you know, is it possible in 50 years, or 100 years, there's nothing left? What if we're making twice as many then as

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we are now? And there's no poles left. Has the Forest Service ever looked at that? I don't think so. I think it should. And if I was an artist I'd be a lot more worried about that. Especially if I wanted my kid to be a carver. I know I'm rambling and I apologize for that, but I did want to put in a plug for a different kind of forestry, I think that it can be done and someone's going to have to be brave and -- the Forest Service already loses millions or hundreds of millions of dollars a year, why not lose money on something that's pioneering and that's sort of establishing a new future way to do it? I think you ought to be thinking about that. I think you ought to do it, and I was very disappointed when I heard that TLMP had considered other alternatives and didn't incorporate them. I think there were proposals for areas of 400-year rotation, was discarded. It was discussed, it was discarded. I hope that in the further analysis of the Gravina sale, that all the testimony that was given tonight is very seriously considered. And I think I'm sort of mirror -- as different as our lives are, I-sort of mirror Mike Sallee's point of view, which is, I don't like the road idea, I'm not opposed to logging per se. if it's done it ought to be incredibly done -- incredibly carefully. An awful lot of those interior units might be draining into their creeks that drain into Bostwick and it's throwing it away. It's the -- it's a very important bay, it has some of the best eel grass in the entire of Southeast Alaska, it's not -- you know, it's productive now, but, you know, put an LTF in there, have silt running down there. Have an oil spill, that will wreck it. And that would be oh, so foolish, thank you very much.

MR. JENSEN: Hello. My name is David Jensen. I'm a member of the KIC Tribal Council, but I'm speaking for myself at this point. I've seen some of the -- well, just some of the most spectacular things I've ever seen around Gravina Island. I spent the night on Punch Hill one night. It's on the southeast end of Gravina and it took us several hours to get up there with our packs and rifles and stuff. We were up deer hunting; it was kind of a miserable day in October, it rained and the wind was blowing and we set up a tent in the alpine right near the top of Punch Hill and the only time we ever saw the sky was about 10:00 o'clock that night. It cleared up, it was just partly cloudy. So we walked up to the top of the mountain and we hung our -- dangled our feet over the cliff and the fog was coming -- hitting the cliffs there and just going over our heads and we could see this little archipelago down at the -- it's Dall Head. There's just a little group of islands down there, but it was a crescent moon and big white puffy clouds, and the moonlight was reflecting on those islands through the clouds and we could see right downtown Metlakatla, and we could see a glow of lights down at Prince of Wales and the loran station over in Carroll Inlet, and to the north was -- you could just see the flash from Ship Island and the northern lights, and you could see Kendrick Bay and it was a pretty awesome sight. It was just too bad that we didn't have a camera that had that sort of capabilities to capture that moment. But it's something I'll never forget.

And another time I was fishing and decided to go grouse hunting. I went up and got a grouse, it seemed like it was pretty close, but it took a while. Just went over the next little hill and he sounded like he was over the next little hill and went on for probably an hour and a half by the time we got there and got the bird and headed back to the boat. And I looked out into Nichols Passage and it was kind of a strange sight because it looked like maybe sea lions or whales feeding out in the middle. So we jumped in the boat and went out there and it was those brown bottlenose porpoise. But I'd never seen those type of porpoise before and there must have been, just a guess would be, 2,000 and as long I maintained the same speed as they were, they would just -- they were porpoising alongside us. And then I finally decided that if a killer whale showed up or something like that they'd be lunch, so I decided to just get away from them and they sounded. They all went under, disappeared at the same time and it was, you know, just quiet, and then they all appeared at the same time, they all jumped up out of the water about six feet. It was just a complete circle of porpoise all the way around me for, I don't know, they must have been 500 yards away, but just a couple of experiences that I've had on Gravina.

I've had some close calls fishing on the western shore of Gravina and not paying attention to the weather and next thing you know it's a scramble to get -- to find shelter. And I've spent the night on the beach there in situations like that, where it was a survival ordeal and it was a good lesson, things not to do and chances not to take, but it's just such a rich area. There's a muskeg south of town on this island that my two older boys got their first deer in, that same muskeg a year apart. And I wasn't able to get back there, but the next time I got back there, there was a logging road right up next to our muskeg. So I'm not sure if my youngest son is going to get his first deer out of that same area. It's -- with that one logging road in that area, it gets a lot of pressure and it's hard to -- hard to get there with out having lot of other traffic around and it's just -- just to much pressure on the deer population.

I just -- I'd just like to teach one Tlingit word to all those that would interfere with our meat locker, our pantry. It's a good little Tlingit word, we use it for nuisance, you know, if you want somebody to just get out of there you (Native word spoken) and that's sometimes if it's a -- it's a dog that's just annoying or somebody else that you just don't want to have anymore just say (Native word spoken) and I think it's time to just leave that island alone it's a -- it's most valuable as it is now. We're not going to increase any value by destroying anything there. Thank you.

MS. CHURCHILL: I'm Dolores Churchill, and I'm representing myself, and Merle thank you for this opportunity to have my say here. When I first came to town in 1946, Carlanna Creek used to have thousands of dog salmon. You could just

walk across and nobody, you know, white people or Indians could go and grab them, and take them home, and jar them or cook them or whatever they wanted to do. Also the same thing at Totem Bight, when you -- where those houseboats are. You used to be able to go there and get crabs and cockles, and when the log dump went in, that killed it off. When Vallenar Point used to be in -- Vallenar -- Vallenar, where the Vallenar trailer court is, that also used to be a place where people could drive out and get cockles. And it's really sad that all these places that were within driving distance are all gone. And one of the things that nobody mentioned here that it's the edible seaweed that we get, the (indiscernible). It's a very ancient plant and it really should be studied because only the male lived. Usually in -- when things are wiped out, it's the female that live, but it's only the male of these -- this edible seaweed that lived and there should be a study. Because if you kill that edible seaweed -- in fact, in our village children were never allowed to harvest it. Only adults. And they would hang onto it to make sure they did not pull the plant up. You would break it. And you never used a knife, you never used a scissor, you had to be really sure, and you always respected that plant. And I'm afraid that if there's a log dump out there, they're going to die, there's nothing going to bring them back and they're endangered and I think that somebody really should do a study before anything is done. Thank you.

MR. MAKUA: I just wanted to make sure that my first comments, I was representing myself and then I needed to also again reiterate that my name is Elmer Makua and I'm also for No Action. I don't think I mentioned that the first time, because my words were so strong. As it was pointed out, there were a couple of things on the EIS that needed to be explained also and that's why I presented to the question and answer period. I think we left that out, and I still have a lot of questions. But, as I mentioned, I'm wearing a lot of hats here, I'm President of the Tongass Tribe as Willie Jackson had mentioned, and I'm also President of the Circle of Concerned Citizens a nonprofit, to protecting sacred sites. I'm also the executive director for Tongass Conservation Society. That's a membership of approximately, give or take, 150 people. And the concern is radiated from all of the memberships, as Merle was mentioning, she represents membership. So when I'm up here speaking it's from a gathered consensus of people of concern. As the gentleman had pointed out there are things that needs either correcting or more attention of how it's worded so that a comment. When this comment period comes isn't full of a lot of questions. The one that concerns me right now, and again this is talking about timber sales, and it was pointed out how much already the Tongass National Forest leads the nation in timber sale losses of about 29.1 million dollars, operating deficit. And this is from a report back in '98 which is the latest year for which figures exist. The United States continues the decades-old pattern of American taxpayers subsidizing Tongass timber losses. The 1998 losses works out to be about \$46,560 of taxpayer subsidies for each timber job on the Tongass, and that's more than a average American household earned in 1998. Using the Forest Service's own figures it works out that it cost the American taxpayer about \$178 for every medium-size old-growth tree cut on the National Forest land of Southeast Alaska, and that's a report from the 1998. The cost of living has gone up since. With reports like these coming in, you would think that they would take a harder look at the causes before cutting more trees that have been part of an ecosystem and that have been providing resources of traditional foods for as long as some of these trees are old. So this makes me think, why do they want this timber sale? What is the purpose and need? It said to move towards the desired future condition identified in the Forest Plan. Well we know there's litigation in courts now that's rejected the desired forest plan, and has moved it back to a 1997 plan. So this changes their intent, or their purpose and need, or that desired future condition.

In the summary of the Environmental Impact Survey there's an explanation, or the correct word used is significant issues, and I'll refer to the book, where it says Issue A, timber economics. People are concerned about economic viability of timber sales, and the impact of timber harvest on other livelihoods in the Ketchikan area, throughout Southeast Alaska. Alternative 2 addresses this. Issue B, subsistence, there is a concern that subsistence resources can be impacted by an open road system on the island and that an activity on Bostwick Inlet will affect the marine subsistence resources. Alternative 3, addresses this issue, Issue C, access. Roaded and trail access on Gravina Island can provide additional recreation opportunities for Ketchikan and Alternatives 2, 3, and 4 address this issue.

Then it goes on to say the following concerns were considered but determined not to be significant issues or their resolution is beyond the scope of this project. The other concerns were fish habitat, water quality, which can be affected by harvesting, and roadbuilding. Harvesting trees and building and maintaining a road for recreational use will change the roadless character of the island. The use of old-growth habitat reserves can be changed by harvesting and roadbuilding. Impacts to scenic integrity of several viewsheds could result from harvesting. It seems to me that the other concerns are as important, if not more important than the significant issues. That makes me wonder why is this timber sale so important. Yes, timber economics can impact the livelihoods in the Ketchikan area. But does the Gravina Timber Sale really have the effect throughout the Southeast Alaska timber industry? What are the total cumulative board feet that have been made available to the industry at present? It was mentioned that this Gravina area is the only area left to do any timber sales. It makes me wonder, why is that? Subsistence is the next subject and right away you can see that there is more emphasis put on economics. The word "people" gives it that personal identifier. Had it mentioned the people were concerned that their

Appendix C

traditional foods would be impacted and that any activity in the Bostwick will affect the resources, I may not have seen the biased in the significances. Access. Access is another key. Roaded and trailed access on Gravina Island has provided additional recreation opportunities for Ketchikan and then they mention that all alternatives address this. That concerns me. I have nothing against more roads and recreation but no mention was made to address the concerns that we need to protect the more than several traditional burial sacred sites, historical and archeological sites, and Native artifacts that are present throughout Gravina Island. It concerns me when the other concerns that cover fish habitat, and water quality, and roadless character, and the old-growth habitat reserves, and the scenic integrity, are determined not -- of significant issues. It should be that all these things are given the same considerations and significance. But there is no mention of it.

I always enjoy talking to young Native and non-Native people alike. Once I asked this non-Native boy what his traditional foods were and he replied, salmon, crab, deer and halibut. My hope is to inform those that I have been using Bostwick Cove, and those that have been using Bostwick Cove and the surrounding areas for the gathering of their traditional foods, that this timber sale is using TLMP, Tongass Land Management Plan, which in 1997 earmarked timber that could be offered to the timber industry, focusing on economics and not on tradition. My words get more harsh here as we go on, but it covers the gist of it and I just want to say that I hope that the character, the integrity, the old growth, the quality and the habitat, is considered. These are the traditional ways, when we take into consideration all (Native language spoken).

(END OF KETCHIKAN TESTIMONY)

Appendix D

Biological Assessment Biological Evaluation

Gravina Island Timber Sale

Biological Assessment and Biological Evaluation

Threatened, Endangered and Sensitive Species

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Appendix D

Biological Assessment and Biological Evaluation: Threatened, Endangered and Sensitive Species

Introduction

This combined Biological Assessment (BA) and Biological Evaluation (BE) was prepared for the Gravina Island Timber Sale as required by Section 7 of the Endangered Species Act (ESA), as amended, and the USDA Forest Service Threatened, Endangered and Sensitive Plant and Animal Species Policy (FSM 2670). This document describes the occurrence of and project effects on species that are federally listed or proposed for Threatened or Endangered status. This document also serves as a BE by including equivalent information on Forest Service Sensitive Species. The BE is not required under the ESA, but is required by the Forest Service for all internal programs and activities (FSM 2672.4).

The Gravina Island project area is located 3 miles west of Ketchikan, Alaska and encompasses 64% of Gravina Island's 61,404 acres. The project area includes 39,400 acres of National Forest System lands, of which approximately 34 percent has been designated as Old-growth Habitat Reserve. The action proposes the harvest of between 803 and 2,218 acres of old-growth forest, construction of up to 22.6 miles of new roads, and the possible development of a log-transfer facility (LTF) at Bostwick Inlet. A Draft Environmental Impact Statement (Draft EIS) has been prepared for the Gravina Island project area, and a Final EIS will be completed in fall 2002.

Lists of Species Covered in this Document and Finding for Each Species

Threatened and Endangered Species potentially occurring in the project area were identified through consultation with the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Consultation correspondences are located in the Gravina Island Project Planning Record at the Ketchikan-Misty Fiords Ranger District. Table 1 lists the Threatened and the Endangered Species that may occur in or near the project area and summarizes the findings of this document.

Table D-1
Threatened and Endangered Species that May Occur in or Near the Gravina Island
Project Area

Common Name	Scientific Name	ESA Status	Summary of BA/BE Finding
Humpback whale	<i>Megaptera novaeangliae</i>	Endangered	No effect
Snake River sockeye salmon	<i>Onchorhynchus nerka</i>	Endangered	No effect
Upper Columbia River spring chinook salmon	<i>Onchorhynchus tshawytscha</i>	Endangered	No effect
Upper Columbia River steelhead	<i>Oncorhynchus mykiss</i>	Endangered	No effect
Steller sea lion	<i>Eumetopias jubatus</i>	Threatened	No effect
Snake River Basin steelhead	<i>Oncorhynchus mykiss</i>	Threatened	No effect
Lower Columbia River steelhead	<i>Oncorhynchus mykiss</i>	Threatened	No effect
Upper Willamette River steelhead	<i>Oncorhynchus mykiss</i>	Threatened	No effect
Middle Columbia River steelhead	<i>Oncorhynchus mykiss</i>	Threatened	No effect
Lake Ozette sockeye salmon	<i>Oncorhynchus nerka</i>	Threatened	No effect
Snake River spring/summer chinook salmon	<i>Onchorhynchus tshawytscha</i>	Threatened	No effect
Snake River fall chinook salmon	<i>Onchorhynchus tshawytscha</i>	Threatened	No effect
Puget Sound chinook salmon	<i>Onchorhynchus tshawytscha</i>	Threatened	No effect
Lower Columbia River chinook salmon	<i>Onchorhynchus tshawytscha</i>	Threatened	No effect
Upper Willamette River chinook salmon	<i>Onchorhynchus tshawytscha</i>	Threatened	No effect

The Forest Service has identified Sensitive plant and animal species that could potentially occur in or near the project area. Table 2 lists Sensitive Species which may occur in the project area and summarizes the findings of this document.

Table D-2

Alaska Region Sensitive Species that May Occur in the Gravina Island Project Area

Common Name	Scientific Name	Summary of BA/BE Finding
Queen Charlotte goshawk	<i>Accipiter gentilis laingi</i>	May affect individuals; not likely to adversely affect population viability
Trumpeter swan	<i>Cygnus buccinator</i>	Not likely to adversely affect
Peale's peregrine falcon	<i>Falco peregrinus pealei</i>	No effect
Osprey	<i>Pandion haliaetus</i>	No effect
Goose-grass sedge	<i>Carex lenticularis</i> var. <i>dolia</i>	No effect
Edible thistle	<i>Cirsium edule</i>	No effect
Davy mannagrass	<i>Glyceria leptostachya</i>	May affect individuals; not likely to adversely affect population viability
Wright filmy fern	<i>Hymenophyllum wrightii</i>	May effect
Truncate quillwort	<i>Isoetes truncata</i>	No effect
Calder's lovage	<i>Ligusticum calderi</i>	Not likely to adversely affect
Bog orchid	<i>Platanthera gracilis</i>	No effect
Loose-flowered bluegrass	<i>Poa laxiflora</i>	May affect individuals; not likely to adversely affect population viability
Unalasaka Mist-maid	<i>Romanzoffia unalaschensis</i>	No effect
Queen Charlotte butterweed	<i>Senecio moresbiensis</i>	Not likely to adversely affect

Field Surveys

Botanical Surveys

Surveys for Sensitive Plants were conducted for the Gravina Island project on 6 days in 1998, 17 days in 1999, and 6 days in 2000 (Woolwine 1998, Dillman 1999a, 1999b, 2000). Efforts focused on ten vascular plant species listed as sensitive by the Alaska Natural Heritage Program, and surveys were completed from mid-June through August. At the direction of the Region 10 Botanist, field personnel used survey methods in accordance with Levels 3 and 4 ("Limited Focus" and "General") of the survey intensity levels recommended by the Forest Service. Unique and unusual habitats were visited first, followed by interior potential harvest areas and proposed road lines.

Twenty (36 percent) of the 56 potential harvest units that occur in at least one alternative were surveyed by a professional botanist, as were approximately 30 percent of the potential road locations (Krosse et al. 1998, Dillman 2000). Two sensitive plants, Calder lovage (*Ligusticum calderi*) and loose-flowered bluegrass (*Poa laxiflora*), were located within the project area. The detailed methods and results of botanical surveys, along with survey routes, can be found in the Gravina Island Planning Record at the Ketchikan-Misty Fjords Ranger District office.

Goshawk Surveys

The objective of goshawk surveys in the project area was to locate goshawk nest sites. Knowledge of nest site locations allows for goshawks to be more accurately considered during project alternative development and analysis. Standards and Guidelines will be applied to any discovered nests.

Goshawk surveys followed the protocol established for the Alaska Region Goshawk Inventory Protocol, first issued June 24, 1992. Areas with reported goshawk observations were the first priority for surveys. Observations ranged in confidence level from low to high. Some reports were for raptors in general. Wildlife crews usually investigated these sightings, if possible, because we felt even a slight possibility of observing a goshawk increased the chances of

finding a nest. Reports of sharp-shinned hawks and red-tailed hawks were not normally pursued unless nesting activity was indicated. Nests of these and other raptor species also receive protection under Forest Plan Standards and Guidelines.

Surveys also included time spent observing from vantage points (Crocker-Bedford 1997). If the protocol station fell at a good vantage point, field crews would often spend 30 minutes or an hour sitting and looking for goshawks. We felt this increased our chances of observing a goshawk. If a goshawk was observed, we could then concentrate our surveys in that direction. While this method is the best available at this time, it does not guarantee that all nests will be found. In fact, we suspect many nests are not found, even if the surveys are conducted close to the nest. A new goshawk monitoring technique developed by Penteriani (1999) is being tested on the Tongass. This technique, which involves monitoring dawn and early morning goshawk vocalizations as a means of detecting nesting areas, was used in the Gravina Island project area (specifically, at Phocena Bay), and on other areas of the Tongass in 1999 and 2000.

From 1994 through 2000, 46 goshawk surveys were completed on Gravina Island. Three surveys were completed in VCU 7610 in 1998 and 1999, six were completed in VCU 7630 in 1998, and 36 were completed in VCU 7620 from 1994 through 2000. Surveys followed Tongass National Forest protocols and included 24 transects with 151 call stations representing 113 hours of effort, and 27 overlook, valley-watch, or dawn observation stations representing 98 hours of effort. Because of previous sightings and observations of goshawks exhibiting nesting behavior, most efforts focused on the area near Phocena Bay in VCU 7620. These efforts resulted in five positive identifications of goshawks in that area. However, to date, no goshawk nests have been located on Gravina Island.

Although there are no confirmed goshawk nests in or near the Gravina Island project area, the numerous observations in the Phocena Bay area suggest the presence of a breeding territory in that part of the project area. It is possible that other breeding territories occur on the project area. Any goshawk nests found during field reconnaissance or unit layout would be protected from harvest by implementing Forest Plan Standards and Guidelines. These require maintenance of an area of at least 100 acres of old-growth (if it exists) generally centered over the nest tree, preferably with a multi-layered, closed canopy and providing foraging opportunities for young goshawks. No commercial timber harvest is permitted, and no continuous disturbance likely to result in nest abandonment is permitted within the surrounding 600 feet from March 15 to August 15. Activity restrictions are removed for active nests that become inactive or are unsuccessful.

Biological Assessment for Threatened and Endangered Species

Humpback Whale

Humpback whales are the most abundant of the eight species of endangered whales that occur in Southeast Alaska waters. The other seven species of whales are either present only seasonally as they migrate along the outer coastal areas, or are only occasionally found in the inside coastal waters of Southeast Alaska. Most of the information and data for whales in Southeast Alaska are associated with the humpback whale. Therefore, the following discussion and analysis is primarily based on humpbacks, but it is assumed to be applicable to other species of whales.

The humpback whale population in the North Pacific is estimated at about 1,200, which is thought to represent about 8 percent of the prewhaling population. These whales are regularly sighted in the Inside Passage and coastal waters of the Southeast Alaska panhandle from Yakutat Bay south to Queen Charlotte Sound. Humpback whales feed in Southeast Alaskan waters from about May through December, although some have been seen every month of the year. Peak numbers of whales are usually found in nearshore waters during late August and September, but substantial numbers usually remain until early winter. Baker et al. (1985)

estimated that 300 to 350 humpback whales inhabit Southeast Alaska during the summer and fall. Humpbacks summering in Southeast Alaska have been linked to three wintering areas in Mexico, Hawaii, and Japan.

The local distribution of humpbacks in Southeast Alaska appears to be correlated with the density and seasonal availability of prey, particularly herring (*Clupea harengus*) and euphausiids. Important feeding areas include Glacier Bay and adjacent portions of Icy Strait, Stephens Passage/Frederick Sound, Seymour Canal and Sitka Sound. Glacier Bay and Icy Strait appear to be important feeding areas early in the season, when whales prey heavily on herring and other small schooling fishes. Frederick Sound is important later in the summer, when whales feed on concentrations of euphausiids. During autumn and early winter, humpbacks move out of the Sound to areas where herring are abundant, particularly Seymour Canal. Other areas of Southeast Alaska may also be important for humpbacks and need to be evaluated. These include: Cape Fairweather, Lynn Canal, Sumner Strait, Dixon Entrance, the west coast of Prince of Wales Island, and offshore banks such as the Fairweather Grounds.

Because the humpback inhabits shallow coastal areas, it is increasingly exposed to human activity. Consequently, these whales may be more susceptible to confrontational disturbance, displacement, and loss of habitat from environmental degradation than some other whale species. The recovery plans for the humpback whale identified six categories of human impacts to these species: hunting, entrapment and entanglement in fishing gear, collisions with ships, acoustic disturbance, habitat degradation, and competition for resources with humans.

National Forest management activities that may have an effect on whale habitats or populations generally fall into the categories of acoustic disturbance and habitat degradation. These management activities include the development and use of LTFs and their associated camps, the movement of log rafts from LTFs to mills, and the potential development of other docks and associated facilities for mining, recreation, and other Forest uses and activities. Generally, with the development and use of LTFs and other docking facilities for projects, there is an associated increase in recreational boating in the immediate vicinity during the construction and use of the facilities.

Construction and operation of LTFs and other docking facilities are restricted to small, very localized areas of the marine environment. There is little potential to directly affect whales with these facilities. Two potential indirect effects of LTFs, other docking facilities and associated activities have been identified: (1) effects on whale prey species, and (2) disturbances of whales by boat traffic associated with LTFs. One alternative for this project proposes the construction of one LTF in Bostwick Inlet. The LTF in this alternative is planned for an inner, relatively shallow area of the inlet that probably is rarely used by whales.

Effects on Prey

Nemoto (1970) noted that euphausiids and gregarious fish are the primary prey of humpbacks. Thirteen species of fish and 57 species of invertebrates were identified as humpback whale prey in Southeast Alaska. Humpbacks studied in Glacier Bay and Stephens Passage-Frederick Sound were found most frequently in areas of high prey density (Wing and Krieger 1983).

Construction and operation of all LTFs and similar facilities require U.S. Army Corps of Engineer, U.S. Environmental Protection Agency, and State of Alaska tidelands permits. The permitting process provides that construction and operation of LTFs maintain water quality in the specific facility locations, and that marine circulation and flushing are maintained. All facilities must be in conformance with permit standards. Although the effects may vary locally, the major effect of leachates (i.e. terpene, alpha-conidendric acid, alpha-conidendrin, hydroxymatairesinol, linoleic acid, and dehydroabietic acid) from bark sloughing off stored log rafts is upon invertebrates. Crustaceans, shrimp, and crab larvae seem especially sensitive (Pease 1973).

Effects from Disturbance

Humpback whale response to nearby boating activity varies from no apparent response to pod dispersal, sounding, breaching, evasive underwater maneuvers, and maintaining distance (Baker and Herman 1983, Baker et al. 1982). Disturbance by boat activity has been suggested as one of the possible causes of observed changes in whale distribution in Southeast Alaska. Direct pursuit of whales by boats and frequent changes in boat speed and direction appear to elicit avoidance behaviors more frequently than other types of boat traffic. However, whales may readily habituate to constant and familiar noise (Norris and Reeves 1978). Whales can be commonly found in some areas of Southeast Alaska which have considerable boat traffic. Whether they are habituated to boat traffic has not yet been documented. Adverse effects from current levels of boat traffic have not yet been documented.

Two basic types of boat activity associated with LTFs are log-raft towing and recreational boating by workers. Log-raft towing frequency would vary between camps, seasons, and years, with an average of about once a week during the working season. Tug boats maintain relatively constant speeds and directions during log-raft towing; constant speed and direction elicit less avoidance behavior from whales than other types of boating activity. Log-raft towing routes are generally well established, and adverse effects from log-raft towing have not been documented.

Because the proposed LTF would occur in a location that already receives considerable recreational boating, and because it would be close to the population center of Ketchikan, recreational boating activity related to this project would likely be indistinguishable from current boating levels. This boating would continue to involve frequent changes in speed and direction and may include some small amount of whale pursuit, if the whales are within sight of an occupied boat. The effect of such recreational activity on whales would depend on many factors such as size of the bay, depth of the waters in the bay, number of boats, individual behavior responses of the whales, etc. Currently, there is not a quantifiable way to estimate these possible effects.

The following Forest-wide Standards and Guidelines have been developed for the Revised Forest Plan and are incorporated into the Gravina Island EIS by reference.

1. Provide for the protection and maintenance of whale habitats.
2. Ensure that Forest Service permitted or approved activities are conducted in a manner consistent with the Marine Mammal Protection Act, the Endangered Species Act, and NMFS regulations for approaching whales, dolphins, and porpoise. "Taking" of whales is prohibited; "taking" includes harassing, pursuing, or attempting any such activity.

No adverse effects on whales from implementation of Forest management activities are anticipated. Indirect effects may be associated with possible increased boating activity, but compliance with Forest Plan Standards and Guidelines should partially mitigate any adverse effects on whales resulting from the proposed timber sale alternatives. Generally, the Forest Service has no control over the routes taken by tugboats with log rafts or recreational boating activities.

Steller Sea Lion

The Steller sea lion (northern) ranges from Hokkaido, Japan, through the Kuril Islands and Okhotsk Sea, Aleutian Islands and central Bering Sea, Gulf of Alaska, Southeast Alaska, and south to central California. There is not sufficient information to consider animals in different geographic regions as separate populations. The centers of abundance and distribution are the Gulf of Alaska and Aleutian Islands, respectively. Important food resources include walleye pollock, salmon, eulachon, and cephalopod mollusks. Steller sea lions forage predominantly in nearshore areas and over the continental shelf.

In 1990, because of a large population decline observed over the last 31 years (primarily in the former Soviet Union, Gulf of Alaska, and Aleutian Islands), the NMFS listed the Steller sea lion as a threatened species throughout its range. The number of sea lions observed on certain rookeries from Kenai Peninsula to Kiska Island declined by 63 percent since 1985 and by 82

percent since 1960. Significant declines have also occurred on the Kuril Islands. The cause of overall population decline has not been confirmed. However, incidental mortality of sea lions in commercial fishing gear, shooting by fishermen, and reduced prey species due to commercial fishing operations, have probably contributed significantly to declines.

When the sea lion was emergency-listed as a Threatened Species in the Federal Register (April 5, 1990), buffer zones restricting human activities were established around rookeries west of 150 degrees west longitude (does not include Southeast Alaska). A recovery team has prepared a recovery plan (National Marine Fisheries Service 1992), and NMFS provides a summary of factors affecting the Steller sea lion (Federal Register April 5, 1991). These factors include: 1) reductions in the availability of food resources, especially pollock, which is the most important prey species for sea lions, 2) commercial harvests of sea lion pups, 3) harvests for subsistence, public display and scientific research purposes, 4) predation by sharks, killer whales, and brown bear, 5) disease, 6) the inadequacy of existing regulations regarding quotas on the incidental harvesting of sea lions during commercial fishing operations, and 7) other natural or human incidences such as shooting adult sea lions at rookeries, haulout sites, and in the water near boats. None of these factors are regulated by or within the jurisdiction of the Forest Service.

Information on population trends in Southeast Alaska is inconclusive, but limited data suggest that Southeast populations are stable or perhaps slightly decreasing. The closest Steller sea lion rookery to the project area is on Forrester Island, west of Prince of Wales Island. There are no known Steller sea lion haul-out locations in the project area; the closest is on the southern tip of Grindall Island, at the south end of Kasaan Peninsula, about 10 miles to the northwest. It has been designated as critical habitat for Steller sea lions. Harassment or displacement of sea lions from preferred habitats by human activities such as boating, recreation, aircraft, LTFs, log-raft towing, etc., is a concern with regard to long-term conservation of the sea lion in Southeast Alaska. Forest-wide Standards and Guidelines direct the Forest Service to prevent and/or reduce potential harassment of sea lions and other marine mammals due to activities carried out by or under the jurisdiction of the Forest Service, and these will be incorporated by reference into the Gravina Island EIS from the Forest Plan. These Forest-wide Standards and Guidelines are as follows:

1. Protect Steller sea lion habitats.
2. Ensure that Forest Service permitted or approved activities are conducted in a manner consistent with the requirements, consultations, or advice received from the appropriate regulatory agencies for the Marine Mammal Protection Act, the Endangered Species Act, and NMFS Standards and Guidelines for approaching seals and sea lions. "Taking" of marine mammals is prohibited; "taking" includes harassing, pursuing, or attempting any such activity.
3. Locate facilities, camps, LTFs, campgrounds, and other developments at least 1 mile from known haulouts, and farther away if the development is large.
4. Cooperate with State and other Federal agencies to develop sites and opportunities for the safe viewing and observation of marine mammals by the public. Maintain a public education program explaining Forest management activities related to marine mammals in cooperation with State and other Federal agencies.

No adverse effects on sea lions from implementation of Forest management activities are anticipated. Indirect effects may be associated with possible increased boating activity, but compliance with Forest Plan Standards and Guidelines should partially mitigate any adverse effects on sea lions resulting from the proposed timber sale alternatives. Generally, the Forest Service has no control over the routes taken by tugboats with log rafts or recreational boating activities.

Pacific Northwest Salmon and Steelhead Trout

The presence of Threatened or Endangered Pacific Northwest salmon and steelhead trout is not documented for salt waters near the project area, but their occurrence is possible. Pink, chum, and coho salmon, and steelhead trout occur in project area fresh waters, however, Chinook salmon do not. A few sockeye salmon are thought to occur each year in project area fresh waters, but no significant runs of sockeye are documented. The application of Forest Plan Standards and Guidelines will be adequate to protect stream fishery resources in the project area. Some increased boating activity may occur between Ketchikan and Gravina Island, and logs may be towed to town, but this increased activity will be almost negligible relative to existing levels of boating activity and should not impact salmon stocks. Based on this information, there will be no effects on any of the 13 listed species shown in Table 1.

Biological Evaluation for Sensitive Species

Trumpeter Swans

The breeding range of the trumpeter swan is concentrated along the Alaska Gulf coast and other wetland areas in central and south central Alaska, and the species winters along the Pacific Coast from the Alaska Peninsula to the mouth of the Columbia River (Bellrose 1980). Each year many trumpeter swans pass through the Ketchikan Area in the spring and fall during migration to and from their breeding grounds. Swans arrive in the area in mid-October as they are migrating south, and those that spend the winter here usually move to large estuaries such as Carroll River once the weather turns cold. Swans typically leave for their breeding area by mid-April. There are no known trumpeter swan nesting pairs on the Ketchikan Area of the Tongass National Forest (West 1991). There are two records of swan observations on Gravina Island. Both were in February of 1992; 2 swans were observed at Bostwick Lake and 31 were recorded at Bostwick Inlet.

All alternatives fully incorporate Forest Plan Standards and Guidelines for trumpeter swans. These forbid disturbance of trumpeter swans during the nesting, brood-rearing, and wintering periods. If trumpeter swans are observed using habitats within the project area, road building and timber harvesting will not occur within 0.5 miles of these habitat when swans are present (usually from November 1 to April 1). These Standards and Guidelines will protect swan habitats from disturbance. Based on the above information, this project is not likely to adversely affect the swan population in Southeast Alaska.

Queen Charlotte Goshawk

The American Ornithologists Union (AOU) recognizes two subspecies of the northern goshawk in North America—*Accipiter gentilis atricapillus* and *A.g. laingi*, the Queen Charlotte goshawk (AOU 1957). Taverner (1940) first described the darker plumaged Queen Charlotte goshawk as a distinct race occurring in the coastal temperate rainforests of the Queen Charlotte Islands and Vancouver Island, British Columbia. Webster (1988) found that the Queen Charlotte goshawk occurred from Vancouver Island north to the Taku River near Juneau. The northern goshawk and Queen Charlotte goshawk are identified USFWS as Species of Concern throughout their ranges.

In May 1994 the USFWS received a petition from the Southwest Center for Biological Diversity and numerous co-petitioners to list the Queen Charlotte goshawk as Endangered pursuant to the Endangered Species Act. In August 1994, the USFWS found that the information presented by the petitioners together with the information in USFWS files was substantial and indicated that listing may be warranted. Therefore, a status review of the species was initiated. After seeking public comments and reviewing available information on the goshawk, a finding was issued in May 1995 that protection under the Endangered Species Act was not warranted for the Queen Charlotte goshawk. Following litigation begun in November 1995, the courts directed the USFWS to reconsider its determination. In August 1997 the USFWS again determined that the Queen Charlotte goshawk did not warrant listing. The petitioners again filed suit against the USFWS for failing to list the Queen Charlotte goshawk, and in July 1999, the Washington, D.C. District Court directed the USFWS to seek better data to support its estimate of the population. In June 2000, the D.C. Circuit Court

remanded the decision back to the District Court with direction to make its findings based on the best available data rather than requiring USFWS to provide new data.

The goshawk is a wide-ranging forest raptor that generally occurs in low densities, from 2.4 pairs (Central Alaska, McGowan 1975) to 11.0 pairs (Arizona, Crocker-Bedford and Chaney 1988) per 100 square kilometers, although population densities in Southeast Alaska may be much lower (Crocker-Bedford 1992). The most recent estimates of the goshawk population in Southeast Alaska range from 100 to 381 pairs (USDA Forest Service 1991a; Crocker-Bedford 1994), to 100 to 800 pairs (Alaska Interagency Goshawk Committee, Report of June 30, 1994).

Generally, goshawks appear to exist in relatively low populations in Southeast Alaska, especially the southern portion. Since 1992, more inventory effort has been spent to find goshawks than any other animal (except fishes) in Southeast Alaska. As of 1998, the cumulative number of known nest areas was 55 throughout all of Southeast Alaska, 18 of these exhibited nesting in 1998. Within the Ketchikan area (southern Southeast Alaska) 12 nest areas were located between 1987 and 1999. Of these 12 nest areas, monitoring crews located 4 occupied nests in 1997, 3 in 1998, 2 in 1999, and none in 2000. In addition, 1 or more goshawks—but no occupied nests—were detected in 2 nest areas in 1997, 3 in 1998, 5 in 1999, and 1 in 2000.

The primary concern for goshawk population viability is habitat loss due to timber harvest. Research within the range of the Queen Charlotte goshawk demonstrated a significantly greater frequency of relocations of radio-marked goshawks in medium-volume and high-volume mature old-growth forest than the proportions of such habitat within the individual home ranges of the birds under study (Iverson et al. 1996). By contrast, clearcuts were the most avoided of all habitats (Iverson et al. 1996). These radio-telemetry results excluded relocations in the vicinity of nests. Habitat comparisons demonstrated that the vicinities of nests included significantly more forest, and significantly less nonforest, than randomly chosen plots (Iverson et al. 1996).

Reynolds (1983) reported home ranges of *A. g. atricapillus* to be 2,000 to 3,200 hectares (4,942 to 7,907 acres). In Southeast Alaska during the breeding season, the mean use area of radio-marked goshawks was 35,000 (214,000 maximum) acres among 17 adult females and 17,000 (48,000 maximum) acres among 16 adult males (Iverson et al. 1996). During the nonbreeding season, the mean (and maximum) use area was 111,000 (452,000 maximum) acres among 16 adult females and 108,000 (562,000 maximum) acres among 15 adult males (Iverson et al. 1996). Goshawks are supported (fed in substantial amounts) by only a portion of the habitats present, and typically most of a home range (where trees are small or sparse) provides little or no sustenance to individuals (Crocker-Bedford 1998). Home ranges appear to be larger (Kenward 1982) and more widely spaced in landscapes where less area exists in stands useful for foraging (Crocker-Bedford 1998). Breeding-pair density appears to depend upon the amount of habitat where suitable prey are more abundant and accessible (proper forest structure) where the chance of prey capture in the habitat is worth the time and energy expended (Crocker-Bedford 1998).

The value of clearcut stands for goshawk nesting or foraging is less than any other habitat in Southeast Alaska, and having large portions of early seral forest in a landscape likely reduces cumulative landscape habitat quality (Iverson et al. 1996). Harvesting of units in the Gravina Island project area would increase the amount of early seral forest, thus reducing the cumulative landscape-habitat quality. Goshawk sensitivity to timber harvest resulted in management recommendations to protect nest-site integrity (USDA Forest Service 1990, 1991a, 1992, 1994b). Other management recommendations recognized the importance of foraging areas within the post-fledging area (Kennedy 1989; Crocker-Bedford 1990b; USDA Forest Service 1991a, 1992, 1994b). There is now widespread recognition of the importance of most foraging habitat, including areas far from the nesting site (Reynolds 1989; Crocker-Bedford 1990a, 1994, 1995, 1998; USDA Forest Service 1990, 1994b; Reynolds et al. 1991; Marshall 1992; Iverson et al. 1996).

No known goshawk territories are located within the project area (see page 4 of this BE). Any pairs of goshawks not discovered prior to timber harvest may be affected if the harvest units correspond to key stands of habitat. Any goshawk nest found prior to harvest will be protected using the Forest Plan Standard and Guideline for goshawk nest buffers (USDA Forest Service 1997). Although the buffer is likely adequate if only 3 percent of the old growth of a drainage is harvested in any 1 decade (Iverson et al. 1996), the nest site will likely not be occupied long after timber harvesting if large amounts of harvest occur in the surrounding watersheds (Crocker-Bedford 1990b, 1991, 1994, 1995; Patla 1991, Reynolds et al. 1991, Marshall 1992, Woodbridge and Detrich 1994, Hayward et al. 1995).

It is our determination that the project may affect individual goshawks if timber harvest activities or roads correspond with goshawk nesting stands or key foraging stands. This determination is based on the following factors:

- Goshawks select for (and apparently depend on) medium-volume and high-volume mature and old-growth-forest habitat.
- Goshawks are sensitive to timber harvest, and the habitat value of clearcut stands is very low.
- Harvesting of the units in the project would increase the amount of early seral forest, thus reducing the cumulative landscape habitat quality.

Mitigation

All units laid out for the project will follow Forest Plan Standards and Guidelines. The project will also follow the Forest Plan strategy for maintaining viable wildlife populations. If the Forest Plan Final EIS (including Appendix N) and ROD are correct in their conclusion that the implemented land-use allocations and Standards and Guidelines are adequate to maintain a viable population of goshawks well-distributed across the forest, then the Gravina Island project will also be consistent with the Forest Service viability regulation and Sensitive Species policy. Even though the cumulative effects of timber harvests in Southeast Alaska are likely to cause individual home ranges and home-range spacing to expand—leading to a reduction in breeding density—it is assumed that consistency with the Forest Plan will achieve the Forest Service viability requirement.

Other Species

Osprey

Because their diet consists mainly of fish, osprey are usually found near water. Nest trees are usually broken-top spruce, either live or dead, and western hemlock snags. There are no known osprey nests located on the Ketchikan-Misty Fjords Ranger District. However, osprey have been known to stop at some lakes on the District during migration. Lakes and streams on the project area may provide an opportunity for migrating osprey to rest and feed. No nests have been recorded in or near the project area, and no osprey have been seen during the breeding season within the project area, despite the fact that osprey tend to be more apparent than most species.

The Gravina Island project is not expected to affect nesting osprey because no known nest site occurs in the project area, and because availability of nesting and foraging areas in Southeast Alaska do not appear to be limiting factors. In addition, minimal or no effect on osprey habitat is expected from project activities because uncut buffers will be maintained near streams, lakes, and coastal areas. If nests are discovered in the project area, Standards and Guidelines outlined in the Forest Plan will be followed. Based on this information, the project is not expected to adversely affect osprey.

Peale's Peregrine Falcon

This species is not listed as endangered or threatened, but is covered by a provision of the "similarity of appearance" which broadens the scope of protection for all peregrine falcons. The nest distribution of this subspecies is closely associated with large seabird colonies located on the outer coasts or nearby islands (USDA Forest Service 1991b), and seabirds are believed to be the major prey of the falcon. In Southeast Alaska, Peale's subspecies of the peregrine falcon (*Falco peregrinus pealei*) nests on the outer islands and on the west coast of Prince of

Wales Island. Although some cliffs on Gravina Island could provide potential nesting sites, no seabird colonies or known nesting sites exist near the project area. Based on this information, the project will not affect Peale's peregrine falcons or their habitat.

Goose-grass Sedge

This sedge is known to occur in the coastal mountains of Alaska and British Columbia, and in the Rocky Mountains from Jasper, British Columbia, south to Glacier National Park, Montana. Its range in Alaska is limited to the subalpine of coastal South-central and Southeast Alaska and the Aleutian Islands. Because this plant is expected to exist in subalpine habitats, no effects are anticipated from this project.

Edible Thistle

This regionally endemic thistle is distributed primarily along coastal Oregon, Washington, and British Columbia and barely reaches southern most Southeast Alaska. It is known to exist in two locations in Misty Fjords National Monument (USDA Forest Service 1994a). Its habitat is characterized as wet meadows and open woods along glacial streams. It is unknown whether this species occurs in the project area. Because timber harvest activities generally avoid wet meadows and stream margins where this species would be expected to occur, no direct effects are anticipated from the project even if the species were to occur in the project area.

Davy Mannagrass

This grass species is distributed from Southeast Alaska to central California. Its distribution in Alaska is limited to central and southern Southeast Alaska, where it is known to occur in only two documented locations: near Wrangell and on Prince of Wales Island. However, it is easily overlooked and likely to be more widespread in Southeast Alaska (USDA Forest Service 1994a). No known populations of this species occur in the project area. It grows in shallow fresh water and along stream and lake margins. Forest Plan Standards and Guidelines protect most of its habitat from disturbance, though smaller streams may not receive buffers in the project. Therefore timber-harvest activities may affect individuals, but are not likely to adversely affect population viability.

Wright Filmy Fern

This fern species occurs in coastal areas of Southeast Alaska and British Columbia. Three locations have been documented in Alaska and are limited to Biorka and Mitkof Islands (USDA Forest Service 1994a). This species appears to prefer humid shaded boulders, cliffs, tree trunks, and damp woods. In Alaska, it has been found in small populations on the base of trees and rock outcrops in damp woods. It is unknown if the species occurs in the project area. However, no observations of this species have been documented for the project area. Undetected individuals could be affected. Because so little is known about the distribution of this plant, it is unknown whether effects to undetected individuals in the project area will adversely affect population viability; hence, the determination is "may effect".

Truncate Quillwort

Truncate quillwort grows immersed in shallow waters of lakes and ponds. This rooted-aquatic species is known from a few widely isolated populations on Vancouver Island and South-central Alaska on the Copper River Delta (USDA Forest Service 1994a). Due to its rooted-aquatic nature, this species does not occur in forested areas where harvest and roading activities would be concentrated. It is unknown whether this species occurs in the project area. Even if the species does exist in the project area, stream and lakeshore buffers, as well as wetland protections, should provide adequate protection for this species. Therefore, no direct effects are anticipated from this project.

Calder's Lovage

This species occurs in British Columbia, Southeast Alaska, and South-central Alaska on rocky cliffs, open boggy or rocky slopes, and edges of coniferous forests. In Alaska it is known to occur in alpine meadow habitats and edges of subalpine mixed-coniferous forest. Previously documented occurrences in Alaska were limited to two areas on Kodiak Island and Dall Island (just west of Prince of Wales Island) in Pleistocene refugia on limestone substrate (USDA

Forest Service 1994a). In 1998, botanists discovered this species at several locations on Gravina Island (Woolwine 1998). However, none of these occurred in proposed harvest areas, and the species' preferred habitats (alpine meadows and subalpine forest edges) are unlikely to be significantly impacted by timber harvest and road-building activities. Because most individuals are expected to occur in or near wetland habitats, timber-harvest activities are not likely to adversely affect population viability.

Bog Orchid

This species of bog orchid is limited to a small geographic range in southern Southeast Alaska and adjacent British Columbia (USDA Forest Service 1994a). Two documented sightings have been made in Alaska near Pearse Canal and on Dall Island. It is unknown if this species occurs in the project area. This plant occurs in wet open-meadow habitat. No observation of this species was made during field reconnaissance. This species is not known to occur in forested areas, and its preferred habitat is not anticipated to be impacted by the project. Therefore, no effects are anticipated from harvest activities.

Loose-flowered Bluegrass

The distribution of this grass species is scattered between Southeast Alaska and Oregon. Seven previous locations have been documented in Southeast Alaska near Hoonah, Sandborn Canal at Port Houghton, and Admiralty Island (Stensvold 1994). Loose-flowered bluegrass is associated with moist, open lowland woods and open-forest meadows. During 1999 field surveys, a small population of this species was located near the proposed lower Bostwick Creek bridge crossing (Dillman 1999). The botanist's report recommended moving the location of the bridge 100 ft. from the proposed location to protect the small population from disturbance related to road and bridge building. Due to trampling of the stream bank by bears, this population could not be relocated during surveys in 2000 (Dillman 2000). Other undetected populations could potentially be affected by timber harvest and road building activities in this species' habitats. Therefore, this project may adversely affect individuals or small populations of loose-flowered bluegrass, but such effects are not likely to cause a trend towards listing the species as Threatened or Endangered.

Unalaska Mist-maid

This herbaceous perennial, a member of the waterleaf family, grows on wet rock outcrops and along shorelines. It is thought to be endemic to the eastern Aleutian Islands, Alaska Peninsula, Kodiak Island, and scattered locations east to Sitka. There are no reliable estimates of its global or statewide abundance, and the only documented occurrence on the Tongass National Forest is from Baranof Island, approximately six miles east of Sitka. This species was not observed within the project area during plant surveys, and its preferred habitat is not anticipated to be impacted by the project. Therefore, no effects are anticipated from harvest activities.

Queen Charlotte Butterweed

This species of butterweed is limited to the Queen Charlotte Islands of British Columbia and to disjunct populations in Southeast Alaska and northwestern Vancouver Island (USDA Forest Service 1994a). Five occurrences have been documented in Alaska on Prince of Wales, Coronation, and Dall Islands. Queen Charlotte butterweed occurs in shady wet areas and bogs of montane to alpine habitats, open rocky or boggy slopes, and open rocky heath or grass communities. It is not known if this species occurs in the project area. No observations of this species were made during field reconnaissance and none have been documented for the project area. Even if this species does occur in the project area, direct effects due to harvest activities are not anticipated to be significant because moist, open habitats are generally avoided for timber harvest. Therefore, this project is not likely to adversely affect the Queen Charlotte butterweed.

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Gravina Island EIS

Supplement to the BE/BA

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Other Species Listed in Alaska

The purpose of this supplement is to address threatened and endangered species that may occur in Alaska but were not covered in the original Biological Assessment for the Gravina Island Timber Sale. None of these species are expected to occur in the project area and there are no impacts expected from this project on any of these species. Table S-1 summarizes the species addressed in this document. The text following the table discusses the expected distribution of each of the species in question.

Table S-1. Threatened and Endangered Species that May Occur in Alaska

Common Name	Scientific Name	ESA Status	Summary of BA/BE Finding
Leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	No effect
Green sea turtle	<i>Chelonia mydas</i>	Threatened	No effect
Loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	No effect
Olive Ridley sea turtle	<i>Lepidochelys olivacea</i>	Threatened	No effect
Eskimo curlew	<i>Numenius borealis</i>	Endangered	No effect
Short-tailed albatross	<i>Phoebastria albatrus</i>	Endangered	No effect
Spectacled eider	<i>Somateria fischeri</i>	Threatened	No effect
Steller's eider	<i>Polysticta stelleri</i>	Threatened	No effect
Aleutian shield fern	<i>Polystichum aleuticum</i>	Endangered	No effect
Blue whale	<i>Balaenoptera musculus</i>	Endangered	No effect
Fin whale	<i>Balaenoptera physalus</i>	Endangered	No effect
Sei whale	<i>Balaenoptera borealis</i>	Endangered	No effect
North Pacific right whale	<i>Eubalaena japonica</i>	Endangered	No effect
Sperm whale	<i>Physeter macrocephalus</i>	Endangered	No effect
Bowhead whale	<i>Balaena mysticetus</i>	Endangered	No effect

Leatherback Sea Turtle

The leatherback sea turtle's range extends from Cape Sable, Nova Scotia, south to Puerto Rico and the US Virgin Islands. During the summer, leatherbacks tend to be found along the east coast of the US from the Gulf of Maine south to the middle of Florida. They are commonly observed by fishermen beyond the 100-fathom curve in offshore waters of Hawaii (NMFS website) and have been recorded in Alaskan waters (ADF&G Wildlife Notebook Series). The project area does not include open waters and should not impact leatherback sea turtles.

Green Sea Turtle

This species is a warm water resident and only occasionally enters the cold waters of Alaska (ADF&G Wildlife Notebook Series). The proposed project will not impact the preferred habitat of the green sea turtle.

Loggerhead Sea Turtle

This species is a warm water resident and only rarely enters the cold waters of Alaska (ADF&G Wildlife Notebook Series). The proposed project will not impact the preferred habitat of the loggerhead sea turtle.

Olive Ridley Sea Turtle

This species is a warm water resident and only rarely enters the cold waters of Alaska (ADF&G Wildlife Notebook Series). The proposed project will not impact the preferred habitat of the olive ridley (Pacific) sea turtle.

Eskimo Curlew

The Eskimo curlew is a northern Alaska species thought to be extinct (ADF&G Endangered Species). Habitat for this species does not occur in southeast Alaska.

Short-tailed Albatross

There are only two breeding colonies of short-tailed albatross that remain active; they are both in Japan (USFWS Fact Sheet). The short-tailed albatross forages widely and has been observed in the Gulf of Alaska along the Aleutian Islands and in the Bering Sea. This species has not been observed in the marine waters of the Inside Passage.

Spectacled Eider

Habitat for this species does not occur on the Tongass National Forest. The spectacled eider occupies the coastal waters around Norton Sound, Ledyard Bay, and Russian waters in the late summer and fall and winter in the Bering Sea between St. Lawrence and St. Matthew Islands (USFWS Fact Sheet). The primary breeding grounds are the arctic coastal plains of Alaska and Russia and the Yukon-Kuskokwim Delta.

Steller's Eider

Habitat for this species does not occur on the Tongass National Forest. Most Steller's eiders winter in the coastal waters from the Aleutian Islands to lower Cook Inlet, with some in Russia and northeastern Europe (USFWS Fact Sheet). The breeding range is northern Russia and northern and western Alaska.

Aleutian Shield Fern

The Aleutian shield fern is endemic to only one island in the Aleutian chain. This species does not occur on the Tongass National Forest (Alaska Natural Heritage Program).

Blue/Fin/Sei/North Pacific Right/Sperm Whales

These whales are generally found in pelagic marine waters. They may be found in outside coastal waters but rarely enter the marine waters of the Inside Passage (NMFS Stock Assessments; ADF&G Wildlife Notebook Series). The project does not propose to impact outside marine waters.

Bowhead Whale

Bowhead whales are a circumpolar, sub-arctic species that winters in the Bering Sea and moves northward for the spring and summer (ADF&G Wildlife Notebook Series). They do not occur in Southeast Alaska.

References

Alaska Department of Fish and Game. Wildlife Notebook Series. Juneau, Alaska.
<http://www.state.ak.us/adfg/notebook/notehome.htm>

Alaska Department of Fish and Game. Endangered Species: Eskimo Curlew.
<http://www.state.ak.us/adfg/wildlife/geninfo/game/curlew.htm>

U.S. Fish and Wildlife Service. Office of Ecological Services. Anchorage, Alaska. <http://alaska.fws.gov/es/te.cfm>

National Marine Fisheries Service. Species information for sea turtles found at
http://www.nmfs.noaa.gov/prot_res/species/turtles

National Marine Fisheries Service. Stock Assessment Reports.
http://www.nmfs.noaa.gov/prot_res/PR2/Stock_Assessment_Program/individual_sars.html

Alaska Natural Heritage Program. Anchorage, Alaska. <http://www.uaa.alaska.edu/enri/rareguide/pdfs/67-68pa.pdf>

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Appendix E

Visual Simulations

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Appendix E

Visual Simulations

To help the viewer visualize the impacts of harvest on National Forest System lands on Gravina Island, photographs were taken from various popular viewpoints around Gravina Island. These photographs were then scanned into the computer. Adobe Photoshop, a photo-editing tool, was used to draw the approximate size and location of units visible from a given viewpoint. The residual stands resulting from harvest were simulated based on specific silvicultural prescriptions such as percentage of trees retained, size of group selections and other direction. The simulations were also based on observations of some of the limited uneven-aged harvest that has occurred on the Forest and some knowledge of what different levels of retention within a unit look like.

This appendix displays the visual simulations from ten viewpoints. The simulations show how a given unit could look after harvest from each viewpoint. Actual on-the-ground situations such as slope, location of reserve trees, streams and topography, size of trees and the species component of the unit could cause the units to look slightly different after harvest.

Each visual simulation is accompanied by a location map that shows proximity to adjacent units. The locations of the viewpoints are shown on map Figure E-1.

Notes on Photo Simulations

Viewpoint 1: Illustrates Alternatives 3, 4, and 6. Unit 5 is not in Alternatives 2 and 5.

Viewpoint 2: Illustrates all alternatives.

Viewpoint 3: Illustrates all alternatives, except Alternative 2. Units 70 and 71 are not in Alternative 2.

Viewpoint 4: Illustrates Alternatives 2, 4, and 5. These units are not in Alternatives 3 and 6.

Viewpoint 5: Illustrates Alternatives 2, 4, and 5. These units are not in Alternatives 3 and 6.

Viewpoint 6: Illustrates Alternatives 3, 4, and 6. Unit 62 is not in Alternative 2. None of these units are in Alternative 5.

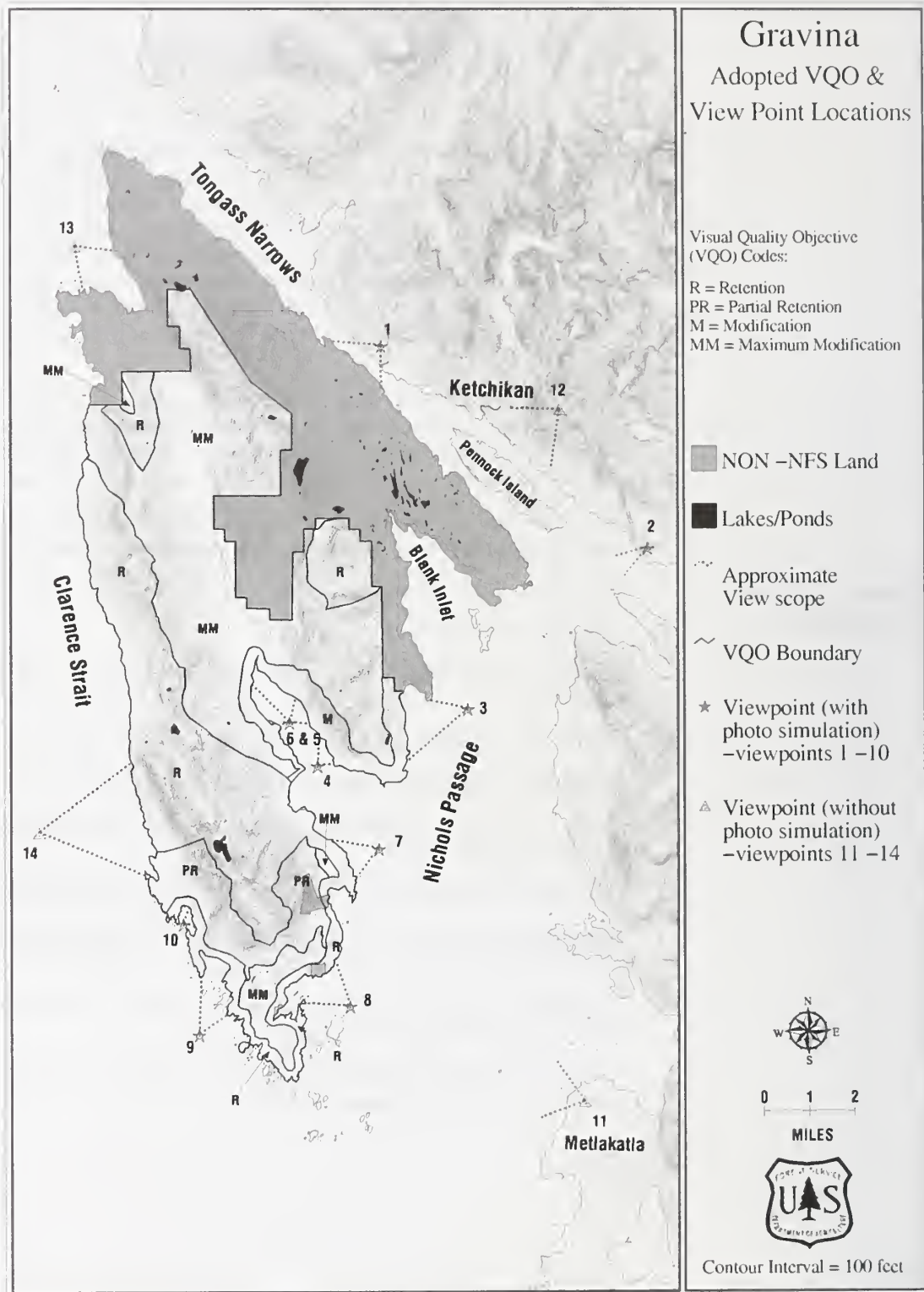
Viewpoint 7: Illustrates Alternative 4. Unit 78 is not in Alternatives 2, 3, and 5.

Viewpoint 8: Illustrates Alternatives 4 and 5. Units 96, 105, and 106 are not in Alternative 3. Units 94, 96, 105, and 106 are not in Alternative 2.

Viewpoint 9: Illustrates Alternatives 4 and 5. Units 90, 91, 92, and 93 are not in Alternative 2. Units 107 and 108 are not in Alternatives 3 and 6.

Viewpoint 10: Illustrates Alternatives 4 and 5. Units 90, 91, 92, and 93 are not in Alternative 2. Unit 108 is not in Alternatives 3 and 6.

Figure E-1
Gravina Island Project Adopted VQO and View Point Locations



AML:/sfiles/unit/km/timber/personal/aml/grvispt811feis.aml

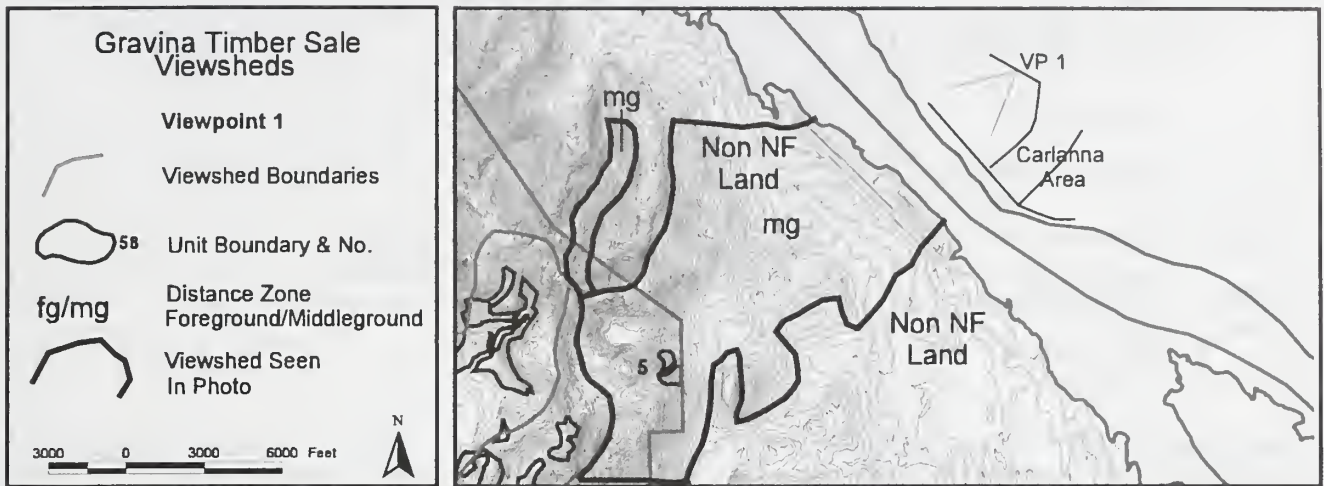
MAP:/sfiles/office/gis/gravina/alan/postscript/grvispt811feis.eps

October 15, 2003

A. Grundy

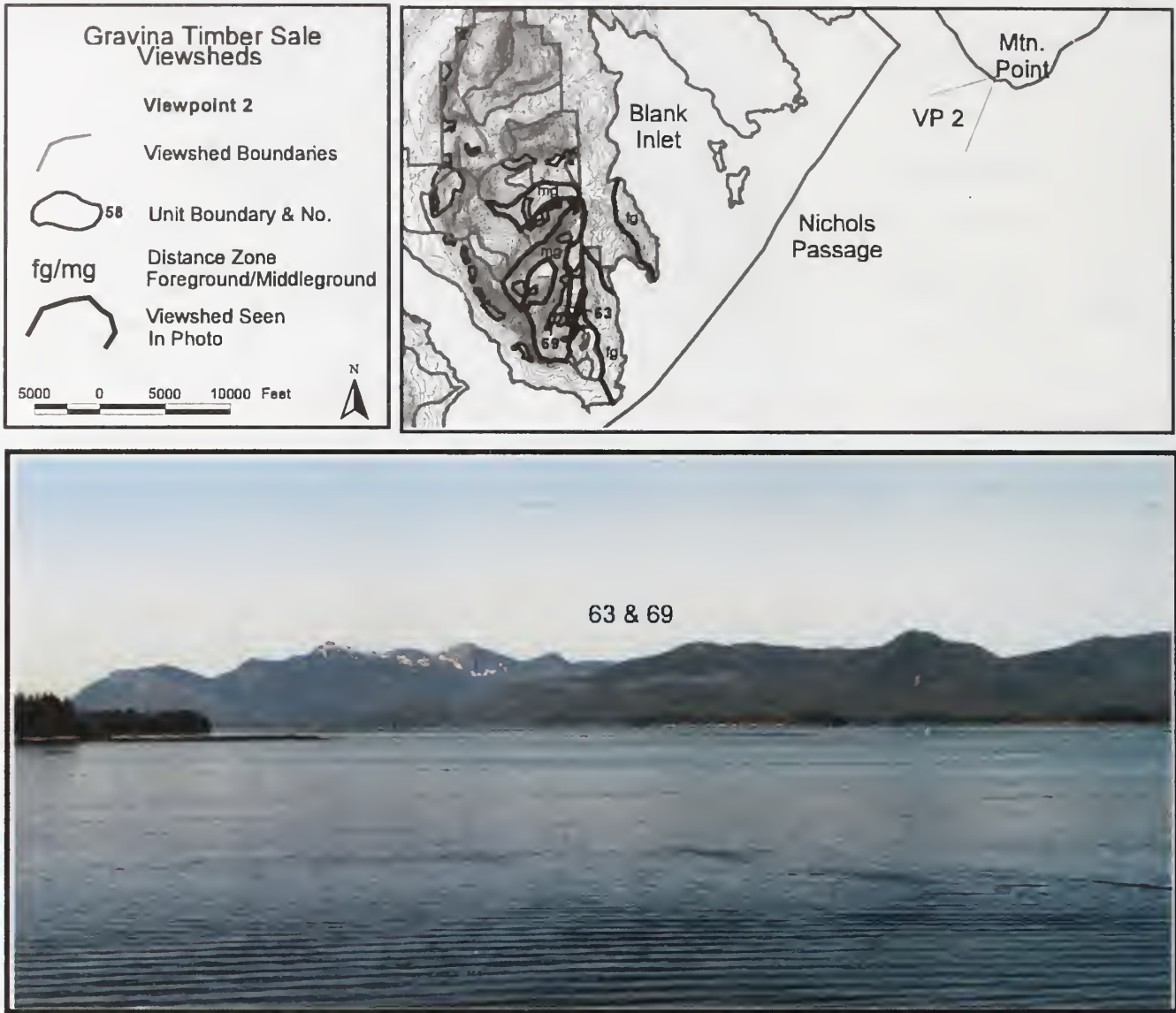
Source: GIS, A. Grundy, 2003

Viewpoint 1 - Figure E-2

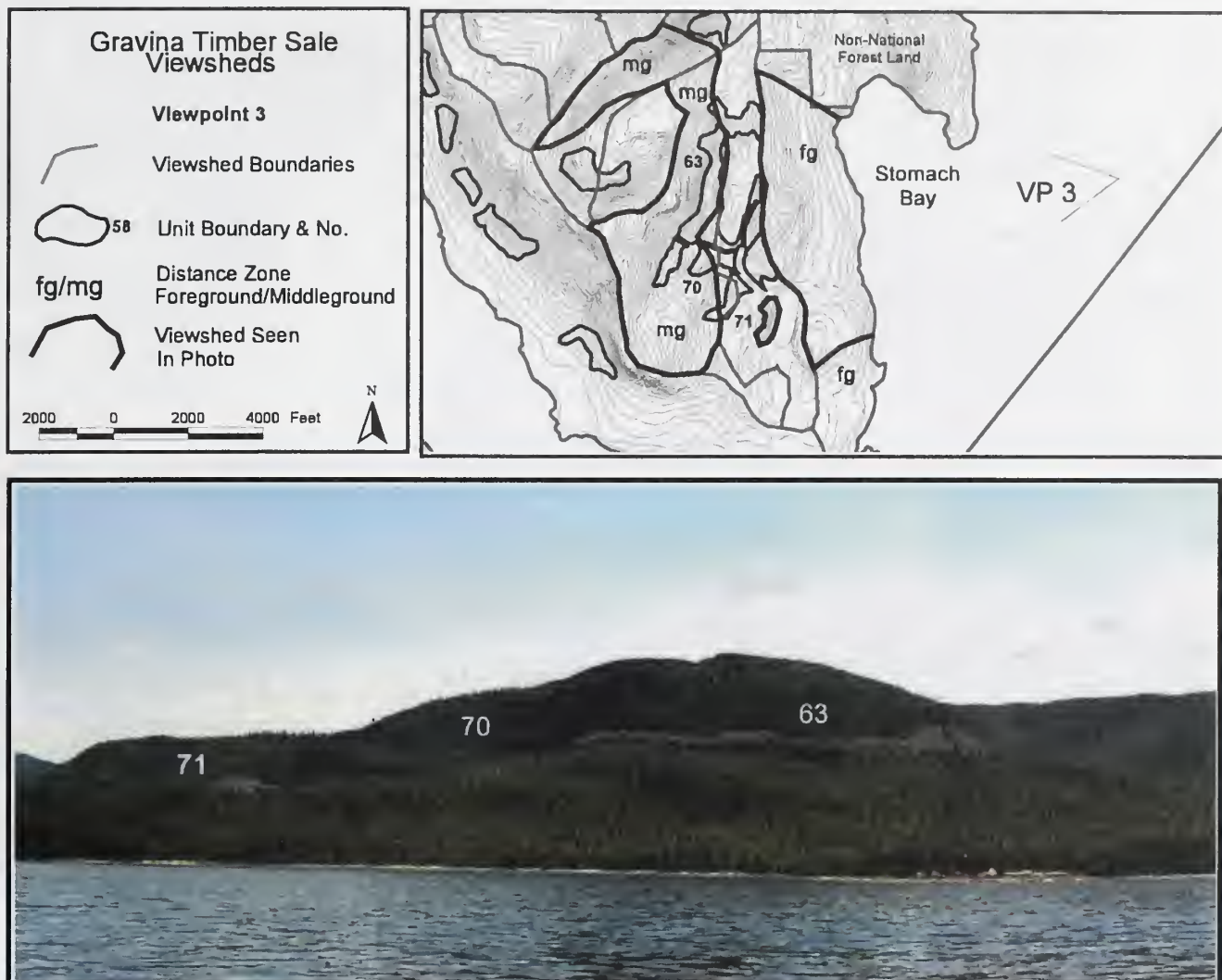


Appendix E

Viewpoint 2 - Figure E-3

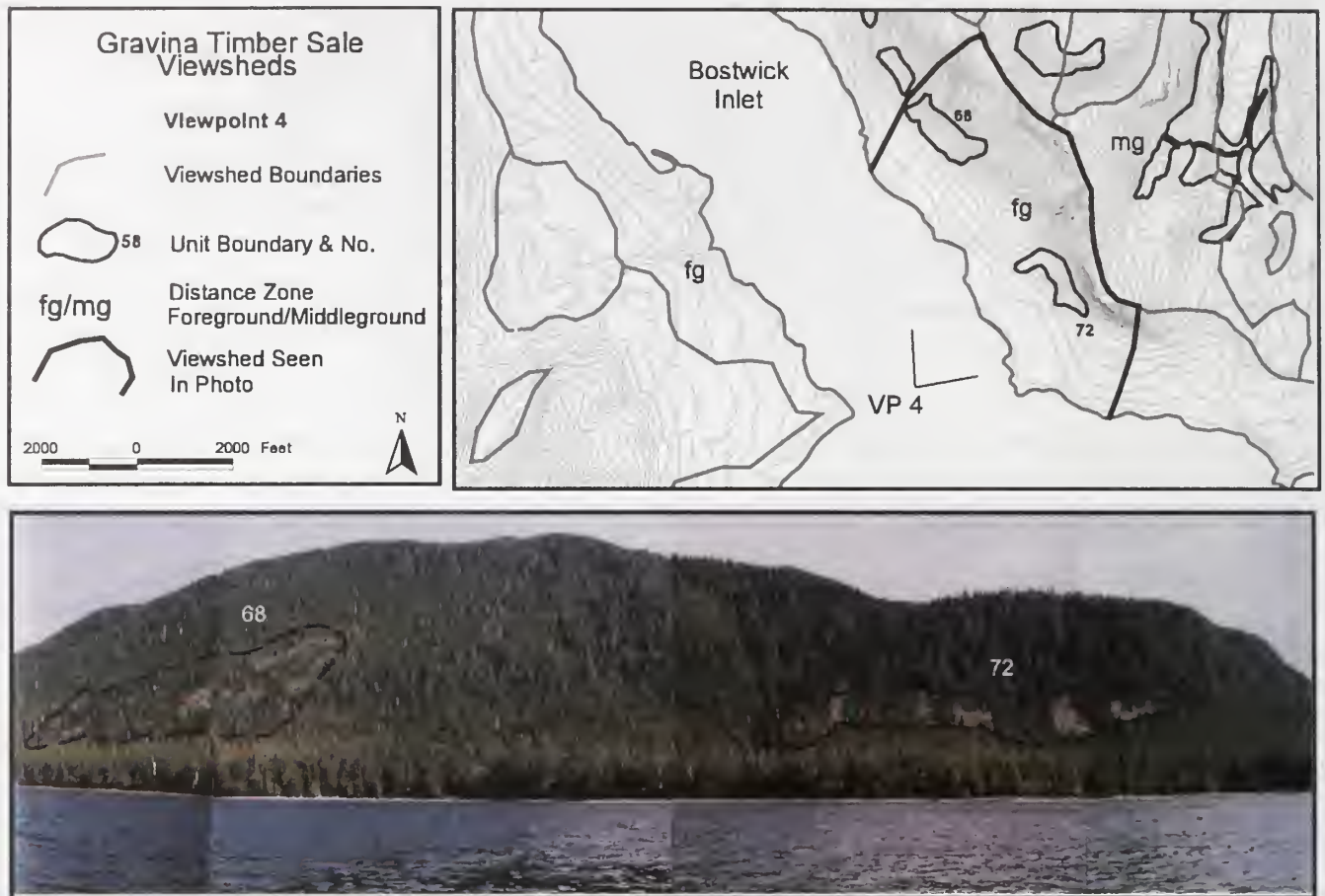


Viewpoint 3 - Figure E-4



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Viewpoint 4 - Figure E-5

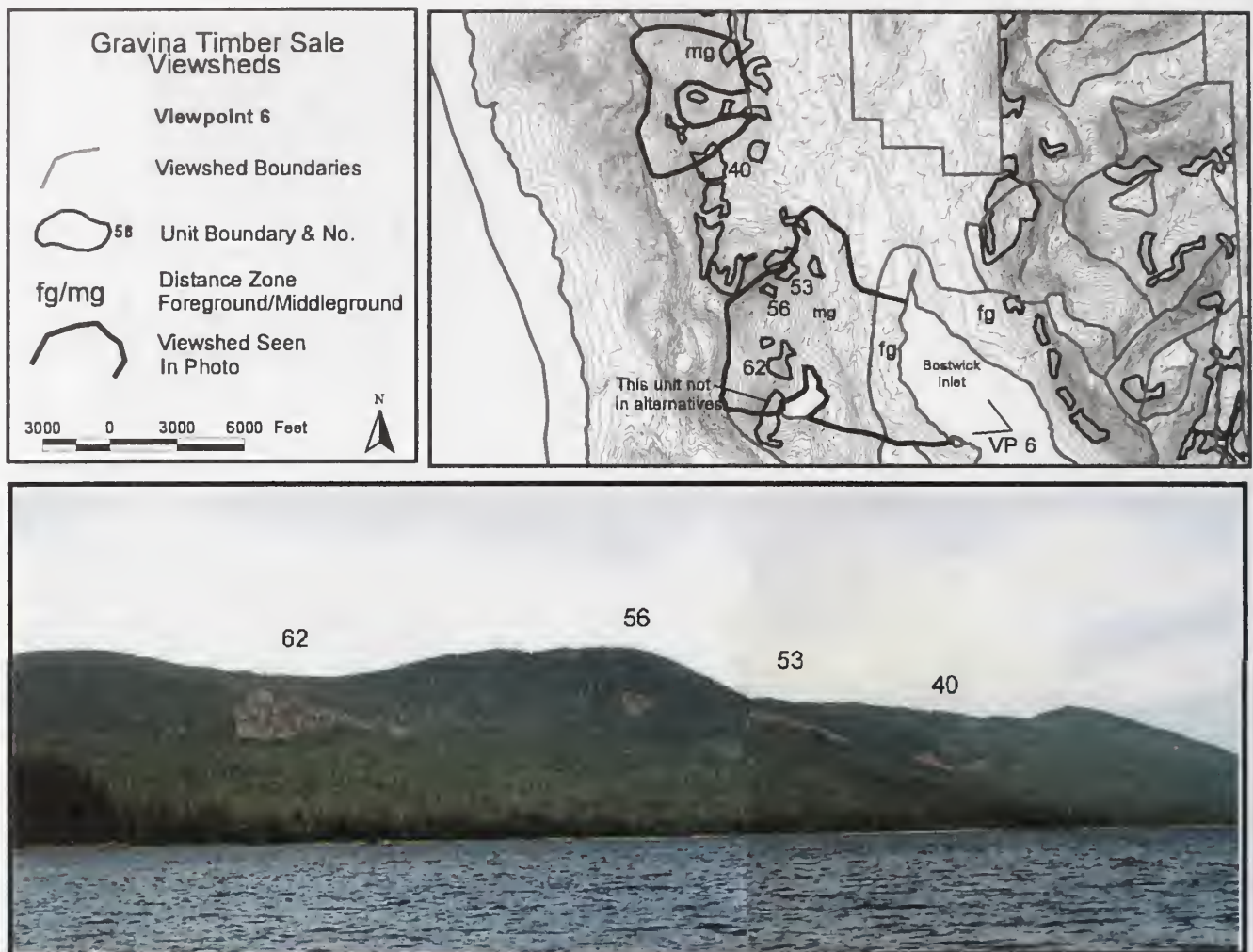


Viewpoint 5 - Figure E-6

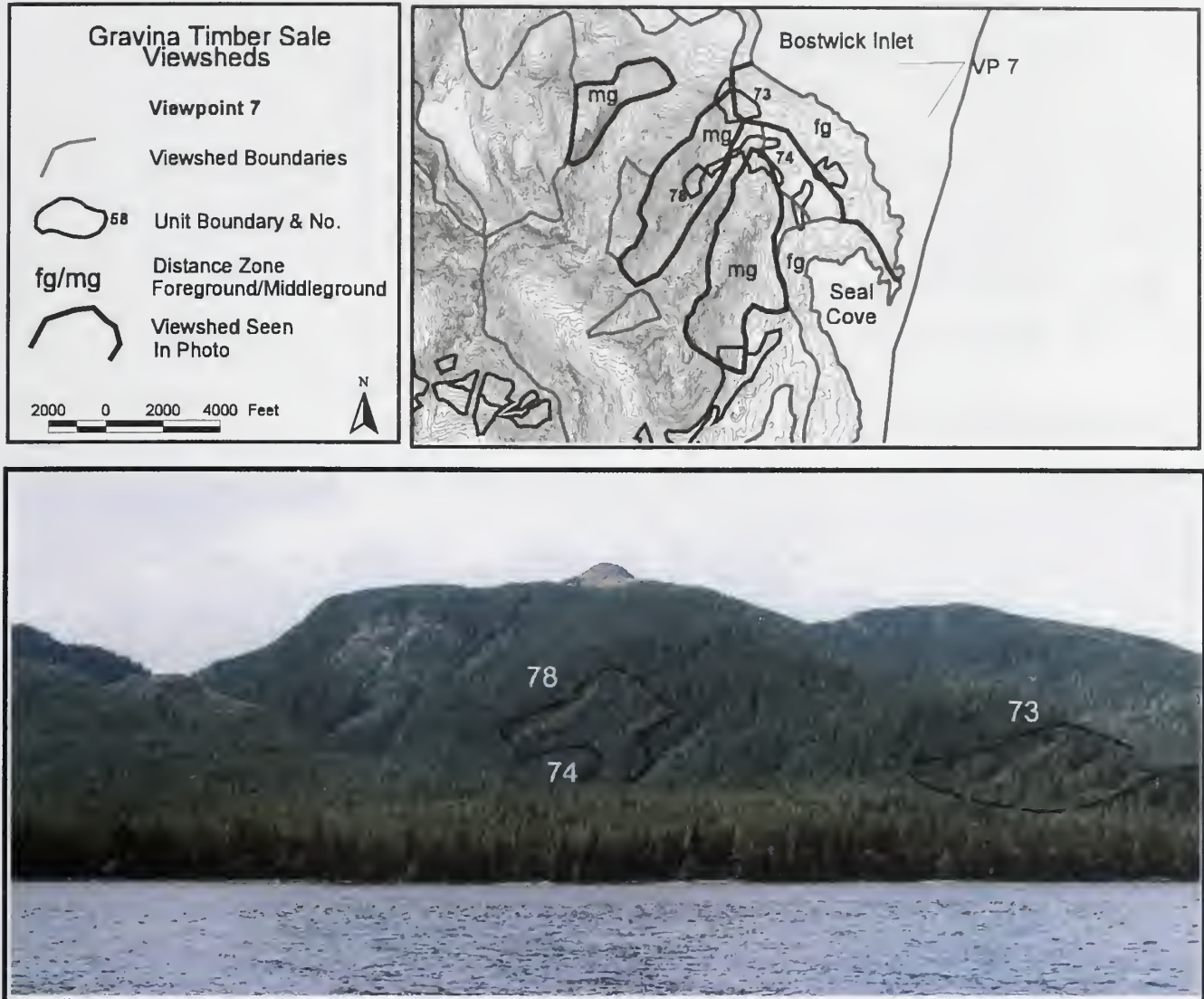


Appendix E

Viewpoint 6 - Figure E-7

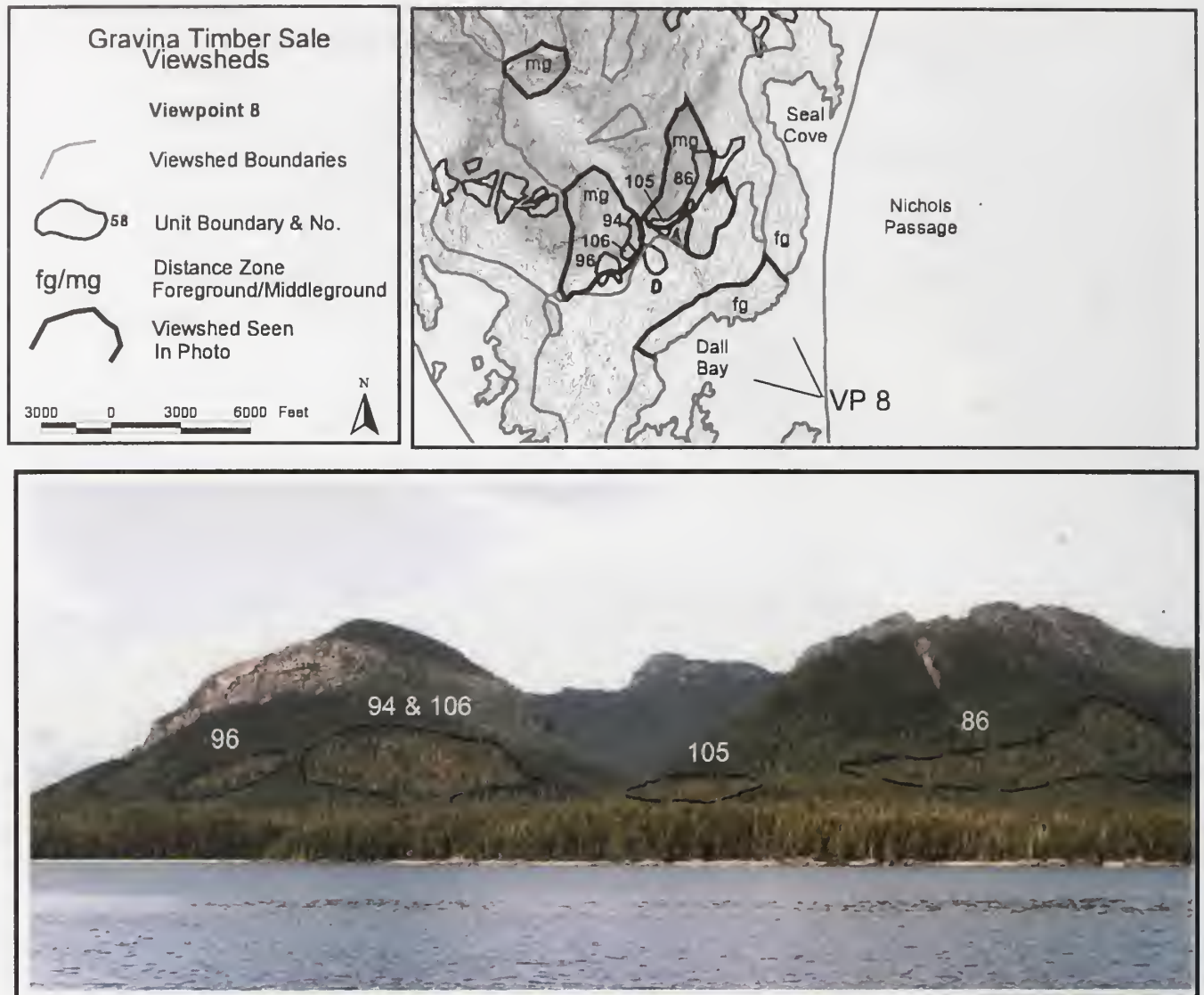


Viewpoint 7 - Figure E-8

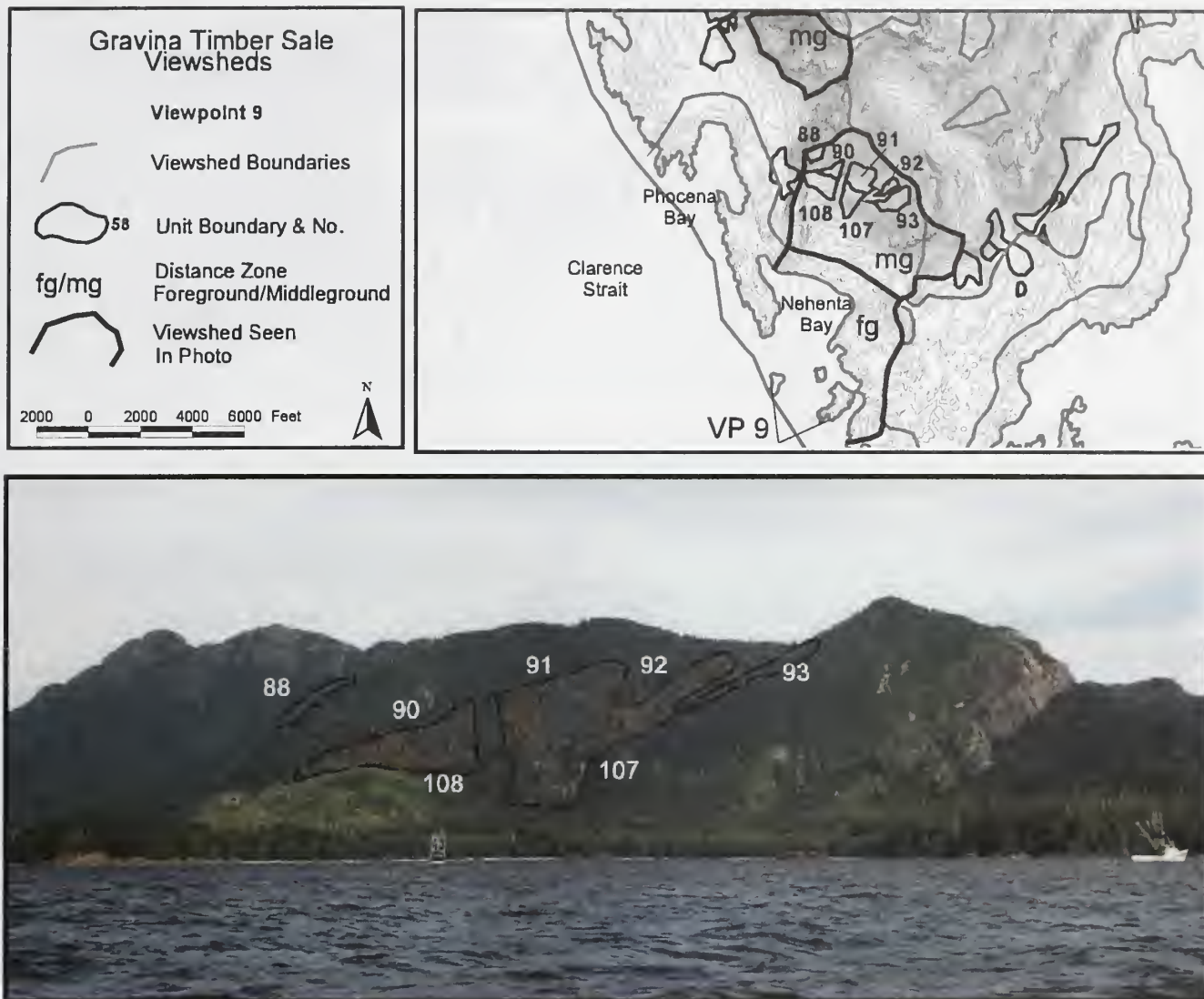


Appendix E

Viewpoint 8 - Figure E-9

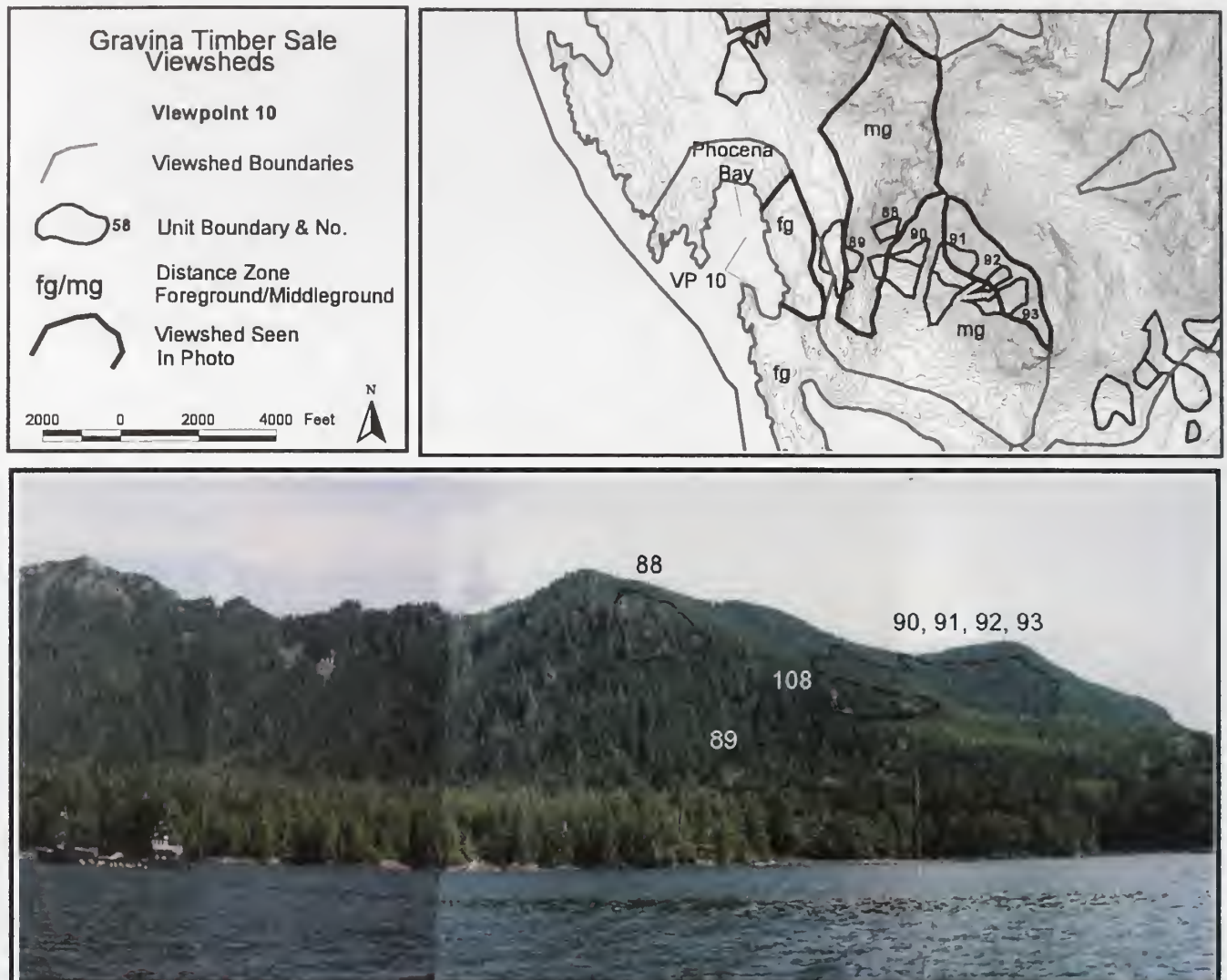


Viewpoint 9 - Figure E-10



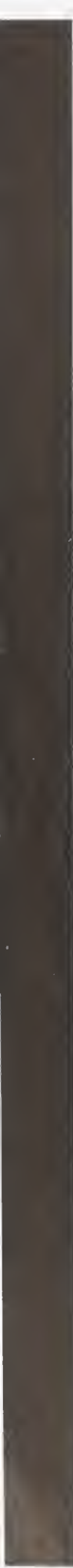
Appendix E

Viewpoint 10 - Figure E-11



Appendix F

Unit and Road Card Changes



Appendix F

Unit and Road Card Changes

Unit and road cards are used to explain site-specific information about each unit or road segment, including harvest treatments and any resource concerns and mitigations. The unit and road cards published in this appendix to the Final EIS display changes that occurred between the Draft and Final EIS, primarily to address resource concerns. The unit and road cards are published in their entirety in the Draft EIS. For a comprehensive picture of all units in each alternative, refer to the alternative maps in Chapter 2 of the Final EIS.

As explained in “Changes Between Draft and Final” in Chapter 2, silvicultural prescriptions were changed for several units (5, 20, 21, 23, 28, 30, 34, 35, 40, 45, 47, 48, 53, 77, 78, 79, 86, 89, 92, 93, 94, 96, 103, and 104) between the Draft and Final EIS, after additional field inventory was completed. These changes were made to address soils and scenery resource concerns, or to allow more intensive harvest if resource concerns were not identified. No changes were made to unit acres or locations.

Changes were also made to three road segments between the Draft and Final EIS. Road 8100320 was shortened to avoid crossing a V-notch stream crossing. Roads 8100200 and 8100220 were re-numbered to better match transportation system conventions; the design and total length of the segments remained the same. Road 8105100 in the Draft EIS was dropped in the Final EIS, and 8105200 was re-numbered as 8105100 in the Final EIS to maintain the sequence.

Forest Plan Standards and Guidelines

General Mitigation Measures and Site-specific Mitigation Measures

General mitigation measures apply to all units and roads in the Gravina Island project. The source(s) of each general measure are listed after the measure in terms of individual Forest-wide Standards and Guidelines (see Chapter 4 of the Forest Plan) or BMPs (see Appendix C of the Forest Plan and Chapter 10 of FSH 2509.22, The Soil and Water Conservation Handbook).

Site-specific mitigation measures can be applied to selected units and/or roads in a project area. These measures are listed on each unit or road card as necessary.

For a detailed listing of General and Site-specific Mitigation Measures, including Visual Quality Objectives, Scenery Standards and Guidelines by LUD, Water Quality and Fisheries (including Process Groups and Channel Types, Riparian Areas, and Windfirm Buffers) see Appendix B of the Draft EIS, Unit and Road Cards.

Silvicultural Prescriptions

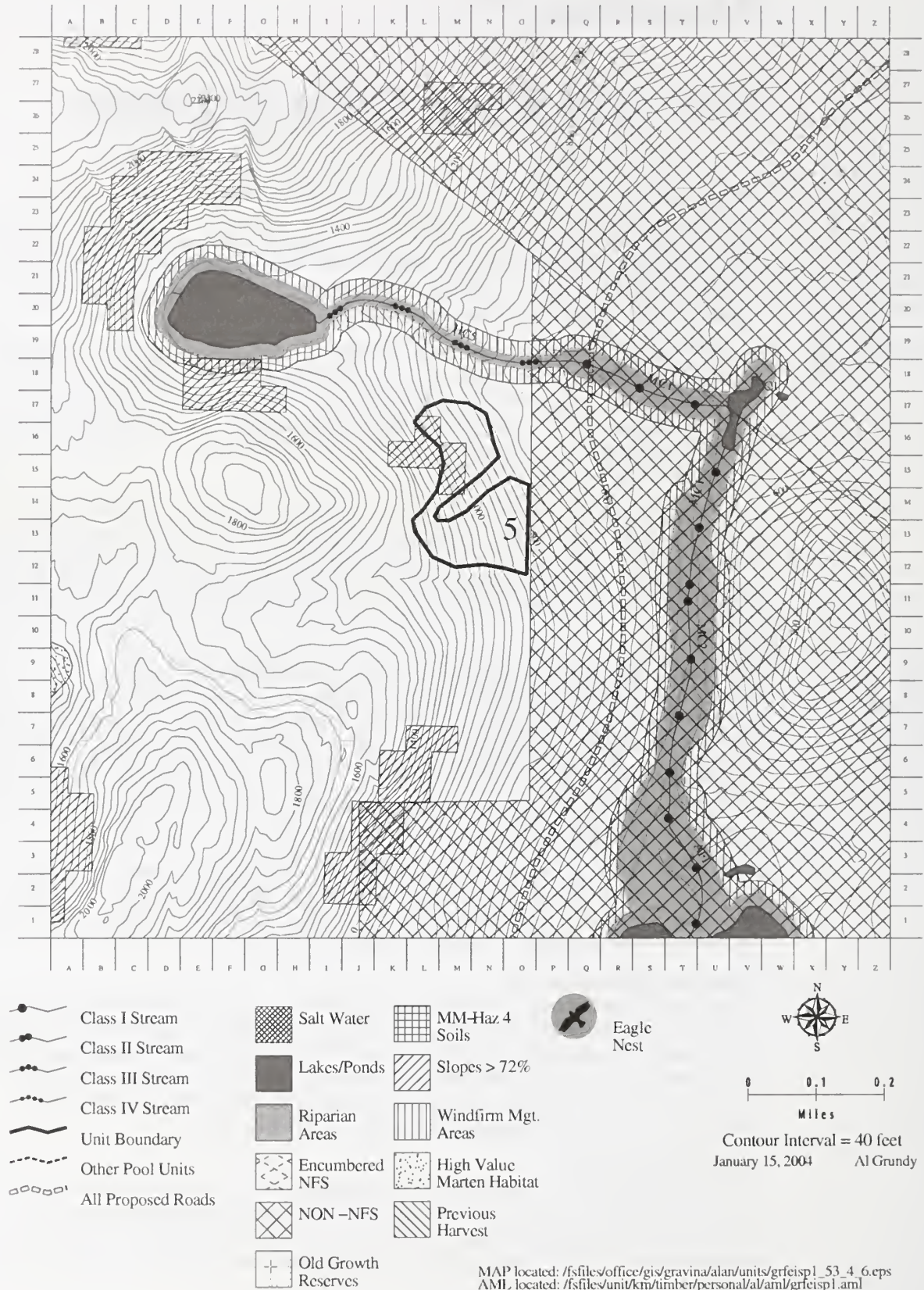
Silvicultural prescriptions for the Gravina Island project area include uneven-aged management (including single-tree selection (STS), group selection (GS), and selection cut (SC)); two-aged management (two-aged clearcut with reserves (2ACCR); and even-aged management (seed tree (ST), even-aged clearcut with reserves (EACCR) and clearcut (CC)). For a more detailed description of these treatments, see Appendix B of the Draft EIS, Unit and Road Cards, or Silviculture and Timber Management in Chapter 3 of the Final EIS.

Encumbered Lands

These are lands that have a claim, lien, charge or liability attached to and binding real property. This includes Native Selection land which is selected but as yet un conveyed by the USDI Bureau of Land Management for lands withdrawn in fulfillment of Native entitlements established under ANSCA. Any areas of encumbered land are displayed on the unit card maps.

Gravina Island Final EIS Unit:5

17 Acres Alternative(s): 3_4_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	5	Planned Unit Acres:	17	Silvicultural Prescription:	STS	In Alternatives:	3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-6	Town/Range/Sect:	75S90E28
		Logging Systems:	helicopter	Total Estimated Harvest Volume (CCF):		272	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

No resource concerns were identified.

LANDS:

Maintain integrity of property line running north and south.

RECREATION/SCENERY:

Unit is visible from many areas of Ketchikan (downtown, west end, Carlanna, Whitecliff areas). Maintain as much forested texture as possible. Limit harvest to that which will create only small gaps in canopy (or slightly enlarged shadows from what is present now). Goal is to meet Retention VQO. 75 percent retention.

SILVICULTURE:

Vegetation: Unit is a two-cohort, western hemlock-western red cedar dominated stand that has small components of Alaska yellow cedar and Sitka spruce. Many of the WRC stems are highly defected. Mistletoe is present in moderately severe infections scattered throughout the stand. Very minor yellow cedar decline is present. Canopy cover is variable, allowing patches of advanced regeneration to occupy the openings. Windthrow potential is estimated to be low.

Desired Future Condition: Stand will have multiple canopy layers. Overall stand will be uneven-aged. 75 percent of the stand is being retained to meet visual quality objectives, maintain slope stability and to provide structure. Natural regeneration through release of established stems is expected to be adequate.

Treatment: Apply a single-tree selection prescription, retaining at least 75 percent of stand structure through individual tree marking, to mitigate the visual and soils concerns. Approximately 1 acre in the west-central portion of the unit will be reserved from harvest to further address soils concerns. A mix of tree species will be left.

SOILS:

Slopes Greater Than 72%: The results of an on-site soil stability investigation determined that single-tree selection harvest will promote slope stability in this unit. No trees will be selected in the central western edge of the unit above the existing landslide (BMP 13.2, 13.5). Approximately 2 acres of slopes greater than 72 percent will be harvested.

TIMBER:

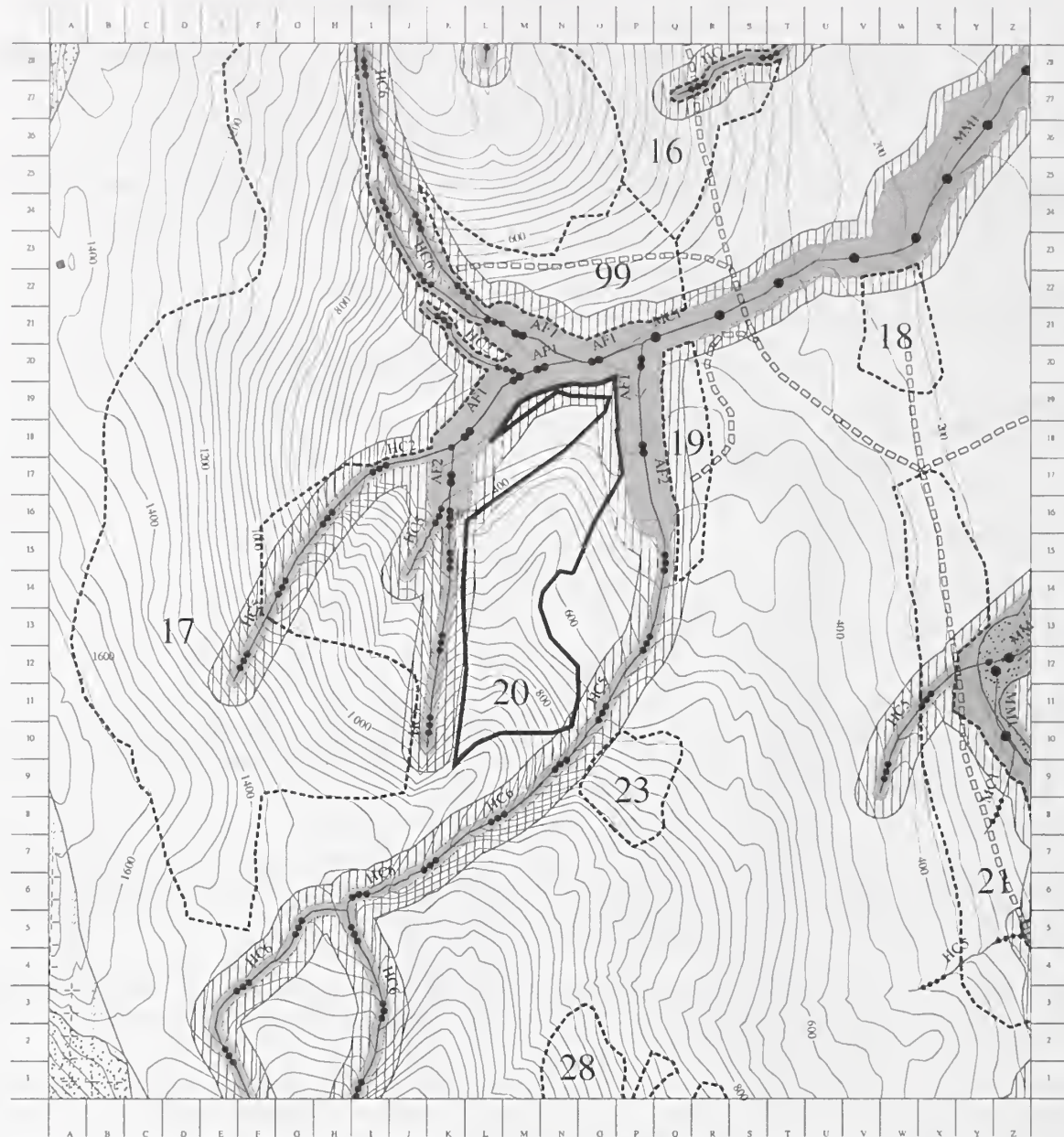
This unit is designed for helicopter yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:20

32 Acres Alternative(s): 2_3_4_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON -NFS
- Old Growth Reserves

- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_202_3_4_6.cps
AML located: /sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	20	Planned Unit Acres:	32	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	198-68	Town/Range/Sect:	76S89E1
		Logging Systems:	ss cable/ helicopter	Total Estimated Harvest Volume (CCF):		2,104	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II (TTRA) AF1 North: 140-foot Standard and Guideline or greater buffer required

Class II (TTRA) AF2 East: 140-foot Standard and Guideline or greater buffer required

Class III HC2/HC5 West: Sideslope Standard and Guideline buffer required

Class III HC5 Southeast: Sideslope Standard and Guideline buffer required

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Moderately productive site located on steep slopes. The overstory is composed of western hemlock, Sitka spruce, western red cedar, and Alaska yellow cedar. There are moderately severe infections of mistletoe scattered throughout the unit. A few areas of cedar decline were noted. There were moderate amounts of physical defect and stem decay was heavy, particularly in the western hemlock and the yellow cedar. The shrub layer consists of blueberry, menziesia, and devil's club.

Desired Future Condition: Stand will be even-aged. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. This will reduce mistletoe, maximize economic return, regenerate a healthy stand with less defect and minimize risk of windthrow.

SOILS:

Slopes greater than 72%: The results of an on-site soil stability investigation determined that slopes greater than 72 percent in the southern 1/3 of the unit require full suspension (helicopter yarding) to protect potentially unstable soils (BMP 13.9). About 9 acres of slopes greater than 72 percent will be harvested.

TIMBER:

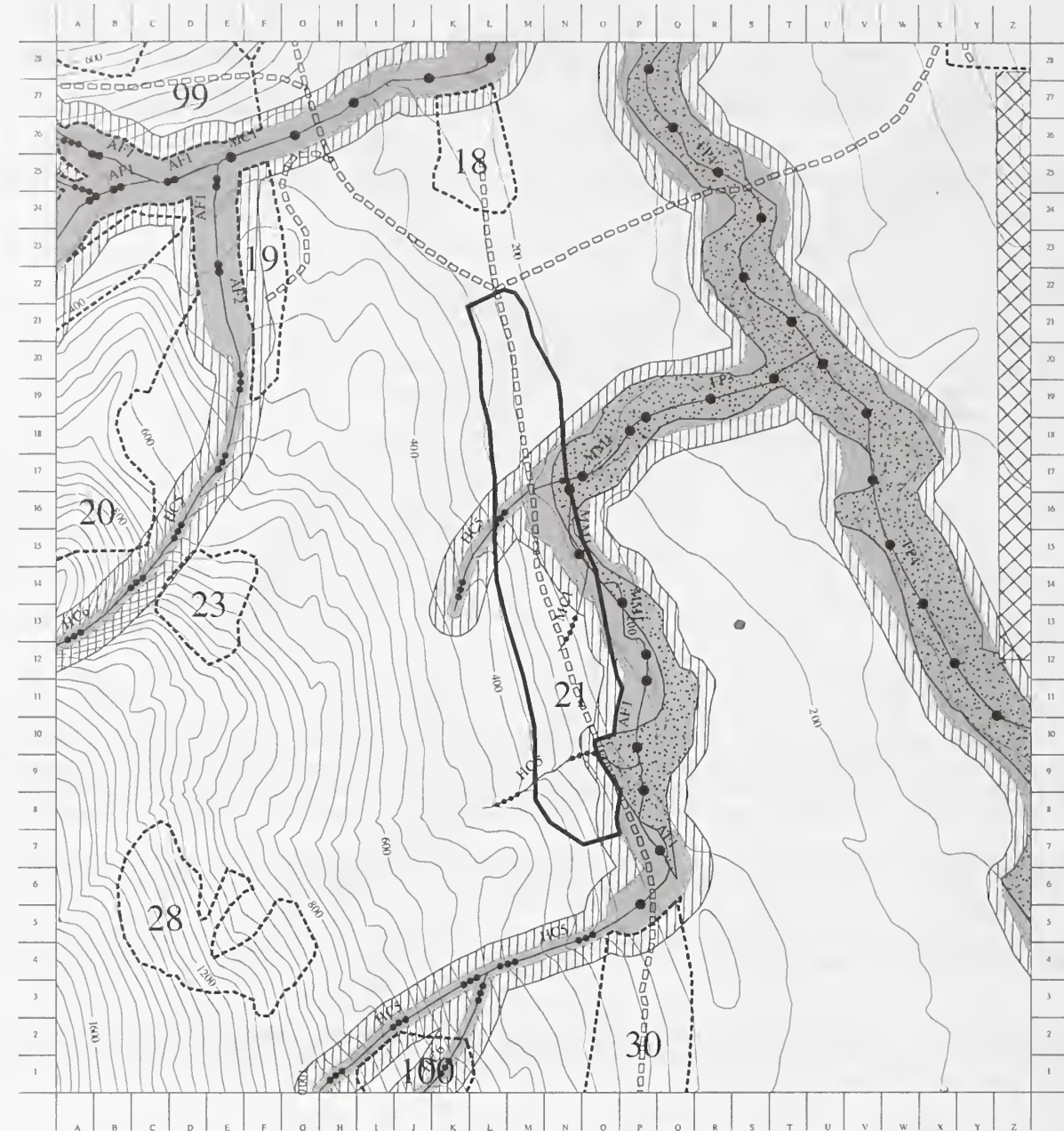
This unit is designed for short-span cable and helicopter yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:21

44 Acres Alternative(s): 2_3_4_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON -NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_212_3_4_6.cps
AML located: /sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	21	Planned Unit Acres:	44	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	198-68	Town/Range/Sect:	76S89E1
		Logging Systems:	ss cable/ shovel	Total Estimated Harvest Volume (CCF):		2,491	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class I (TTRA) FP3 East: 250-foot or greater buffer required

Class III HC5 Northcentral: Sideslope Standard and Guideline buffer required

Class I (TTRA) MM1 East: 120-foot Standard and Guideline or greater buffer required

Class IV HC5 East central: Requires directional felling, partial, or full suspension

Class IV MC1 Southcentral: Requires directional felling, partial, or full suspension

Class I (TTRA) AF1 Southeast: 140-foot Standard and Guideline or greater buffer required

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Concentrate reserve trees in windfirm clusters along road corridor to provide some old-growth stands along main arterial.

SILVICULTURE:

Vegetation: This unit has fairly even, gentle terrain with an east aspect. The forest type is varied and patchy with a heavy red cedar component. There are many areas of low site productivity with mixed conifer forest that have a high numbers of snags and very open canopies. There are also other pockets of higher volume timber with both red cedar and yellow cedar. Despite the high occurrence of cedar, most of the advanced regeneration is western hemlock. Windthrow hazard is estimated to be low. There are light infections of mistletoe in most of the hemlock throughout the unit and some cedar decline is present as well. Salal is the dominant understory species.

Desired Future Condition: Future stand will be even aged. Natural regeneration may be inhibited in areas of heavy salal cover. Monitor closely. Future treatments may include planting in areas of salal cover and/or pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. This will reduce mistletoe and reduce highly defected stems, maximize economic return, and minimize risk of windthrow. Attempt to feather unit edges to minimize risk of windthrow along unit edge. Where possible, retain unmerchantable trees throughout unit, particularly red and yellow cedar trees to encourage cedar regeneration.
T2

SOILS:

No resource concerns were identified.

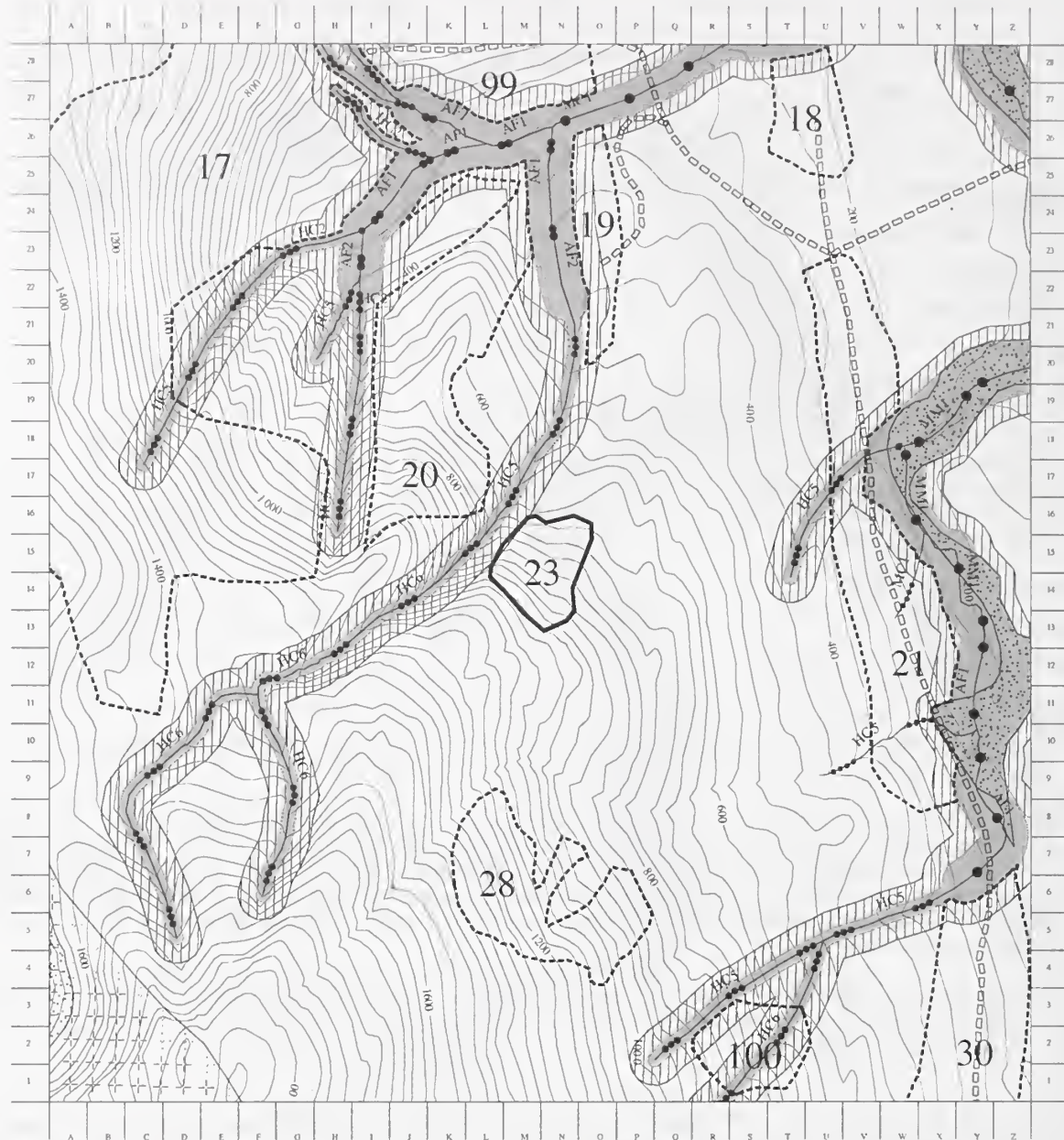
TIMBER:

This unit is designed for short-span cable and shovel yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:23 8 Acres Alternative(s): 2_3_4_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_232_3_4_6.eps
AML located: /sfiles/unit/km/timber/personal/al/am/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	23	Planned Unit Acres:	8	Silvicultural Prescription:	EACCR	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
	Primary WAA Number:	101	Photo:	198-66	Town/Range/Sect:	76S89E1	
	Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):	423			

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class III HC5 Northwest: Sideslope Standard and Guideline buffer required

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Unit overstory is varied and is dominated by western hemlock (42 percent), mountain hemlock (26 percent), and Alaska yellow-cedar (16 percent) with minor components of spruce and western red cedar. There is minor windthrow evidence. There are minor to moderate severities of mistletoe infections scattered throughout.

Desired Future Condition: The middle story canopy layer will become the dominant overstory, which should allow for release of established stems in the understory. Natural regeneration through release of the understory is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply an even-aged clearcut with reserves prescription. Retain all trees less than or equal to 15 inches in diameter. There are approximately 20 yellow cedar trees/acre less than 15 inches. This will allow for adequate regeneration of yellow cedar on the site. This will maintain some forest structure throughout, promote soils stability and allow for release of the understory cohort. The helicopter yarding system should enable protection of the advanced regeneration in the understory.

SOILS:

Slopes Greater than 72 percent: The results of an on-site soil stability investigation located slopes greater than 72 percent along the upper western boundary. Full suspension is required (helicopter yarding) to maintain slope stability (BMPs 13.9). About 3 acres of slopes greater than 72 percent will be harvested.

TIMBER:

This unit is designed for helicopter yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:28

19 Acres Alternative(s): 2_3_4_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON -NFS
- Old Growth Reserves

- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /fsfiles/office/gis/gravina/alan/units/grfeisp1_282_3_4_6.eps
AML located: /fsfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	28	Planned Unit Acres:	19	Silvicultural Prescription:	EACCR	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	198-65	Town/Range/Sect:	76S89E12
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):	1,084		

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Stand is located at moderately high elevation (1,300-1,500') and is low to moderate in productivity with a high amount of physical defect in standing timber. The overstory is composed of western hemlock (61 percent), western red cedar (4 percent), Alaska yellow cedar (2 percent), and mountain hemlock (33 percent). Yellow cedar decline was severe in the southeastern portion of the stand. The shrub layer consists of blueberry and menziesia.

Desired Future Condition: The middle story canopy layer will become the dominant overstory, which should allow for release of established stems in the understory. Natural regeneration through release of the understory is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply an even-aged clearcut with reserves prescription. Retain all trees less than or equal to 13 inches in diameter. This will maintain some forest structure throughout, promote slope stability and allow for release of the understory cohort. The helicopter yarding system should enable protection of the advanced regeneration in the understory. There were approximately 250 yellow cedar seedlings/acre in the understory that should be allow for maintaining yellow cedar on the site.

SOILS:

Slopes Greater than 72%: No slopes greater than 72 percent will be harvested.

TIMBER:

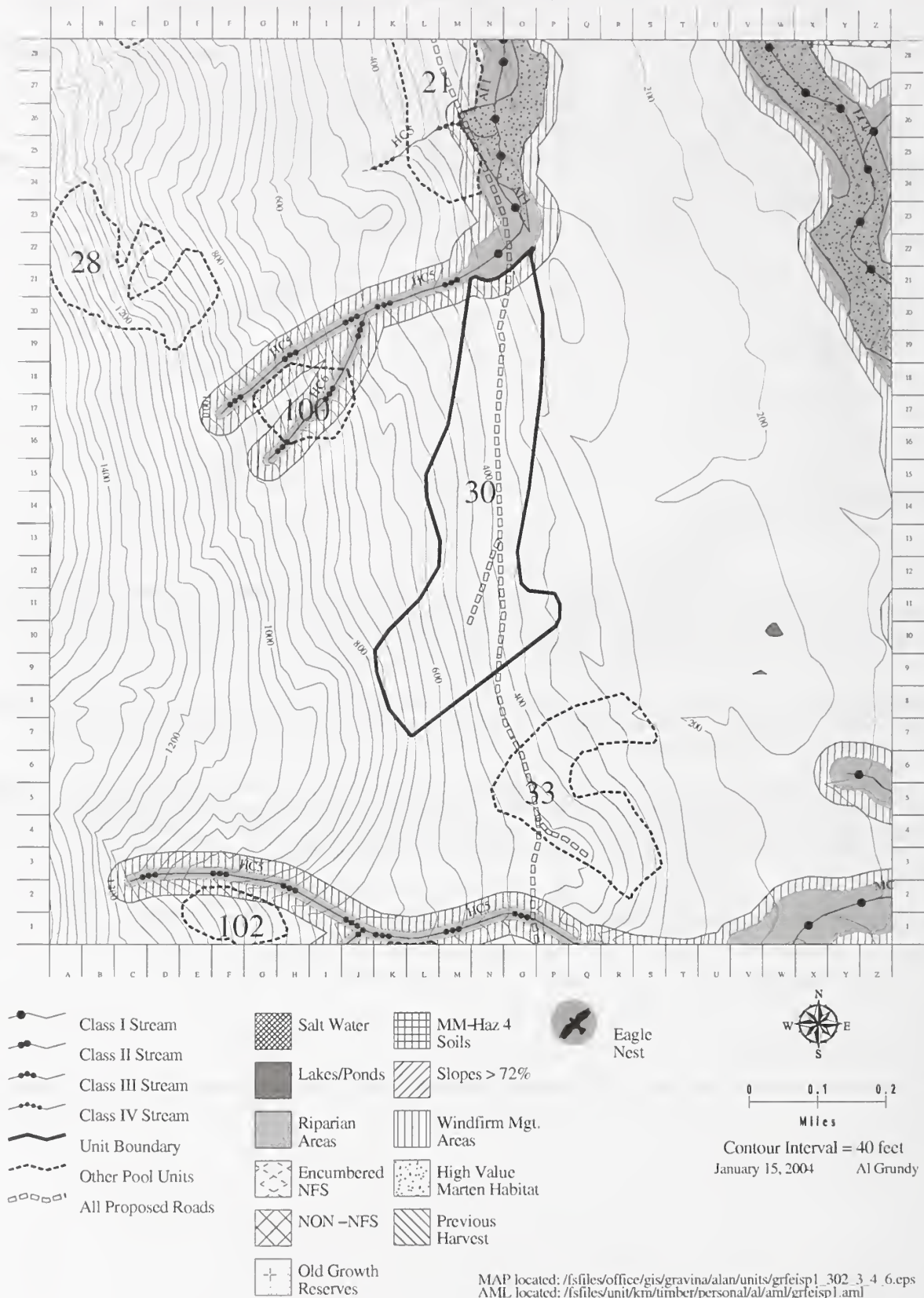
This unit is designed for helicopter yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:30

60 Acres Alternative(s): 2_3_4_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	30	Planned Unit Acres:	60	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	7631
		Primary WAA Number:	101	Photo:	298-107	Town/Range/Sect:	76S90E7
		Logging Systems:	short-span cable	Total Estimated Harvest Volume (CCF):			3,339

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class I (TTRA) AF1 North: 140-foot Standard and Guideline or greater buffer required

Class III HC5 Northwest corner: Sideslope Standard & Guideline buffer required

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Concentrate reserve trees in windfirm clusters along road corridor to provide some old-growth stands along main arterial.

SILVICULTURE:

Vegetation: This unit has fairly even, gentle terrain with an east aspect. The forest type is varied and patchy with a heavy red cedar component. There are many areas of low site productivity with mixed conifer forest that has high numbers of snags and very open canopies. There are also other pockets of higher-volume timber with both red cedar and yellow cedar. Despite the high occurrence of cedar, most of the advanced regeneration is western hemlock. Windthrow hazard is estimated to be low, except in the northern portion of the unit, where windthrow potential is estimated to be moderate to high. There are light infections of mistletoe in the hemlock and some cedar decline. There is moderate to moderately high amounts of physical defect present, particularly in the western redcedar. Salal is the dominant understory species.

Desired Future Condition: Future stand will be predominantly even aged. Natural regeneration may be inhibited in areas of heavy salal cover. Monitor closely. Future treatments may include planting in areas of salal cover and/or pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription to reduce mistletoe, maximize economic return, regenerate a healthy stand with less defect and minimize risk of windthrow. Where possible, attempt to leave some red and yellow cedar trees to encourage a cedar component in the advanced regeneration. T2

SOILS:

No resource concerns were identified.

TIMBER:

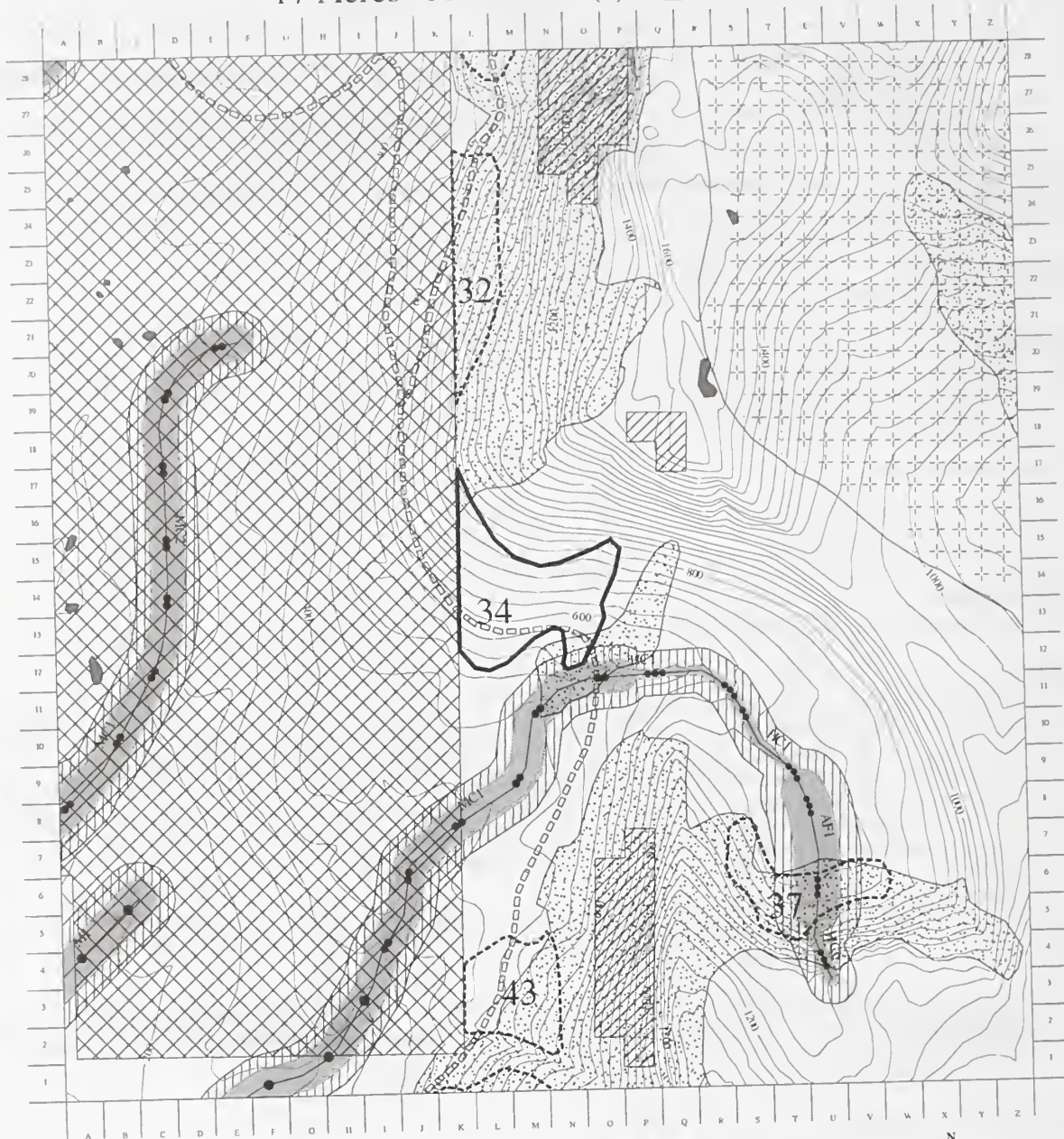
This unit is designed for short-span cable yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:34

17 Acres Alternative(s): 2_4



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves

- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_342_4.eps
AML located: /sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	34	Planned Unit Acres:	17	Silvicultural Prescription:	CC	In Alternatives:	2, 4
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-13	Town/Range/Sect:	76S90E16
		Logging Systems:	short-span cable	Total Estimated Harvest Volume (CCF):			927

CULTURAL RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II (TTRA) MC1 Southeast: Greater of 100-foot or RMA (top of V-notch) buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

Maintain integrity of boundary.

RECREATION/VISUALS:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Stand is a western hemlock-western red cedar forest type that transitions to pure western hemlock in the upper northeastern reaches. Windthrow potential appears to be low. There were several areas of dying trees that are caused by root rot, resulting in a higher number of snags than average (45/acre). Moderate infections of mistletoe present in most of the western hemlock. Understory is dominated by menziesia, blueberry, and devil's club. A Pacific yew tree was found within the unit.

Desired Future Condition: Stand will be predominantly even aged with some reserve clumps and scattered trees in the southeastern portion of unit. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. There is an area of high-value marten habitat within the unit, in the southeastern portion. Maintain 10-20 percent of the stand structure in this area. This prescription will reduce mistletoe, maximize economic return, and minimize risk of windthrow. If possible, retain trees throughout the unit, particularly snags and near snags of large diameter. Flag and document any yew trees found during layout. Implement a site-specific silvicultural prescription that will maintain the Pacific yew's regeneration capabilities on site.

SOILS:

No resource concerns were identified.

TIMBER:

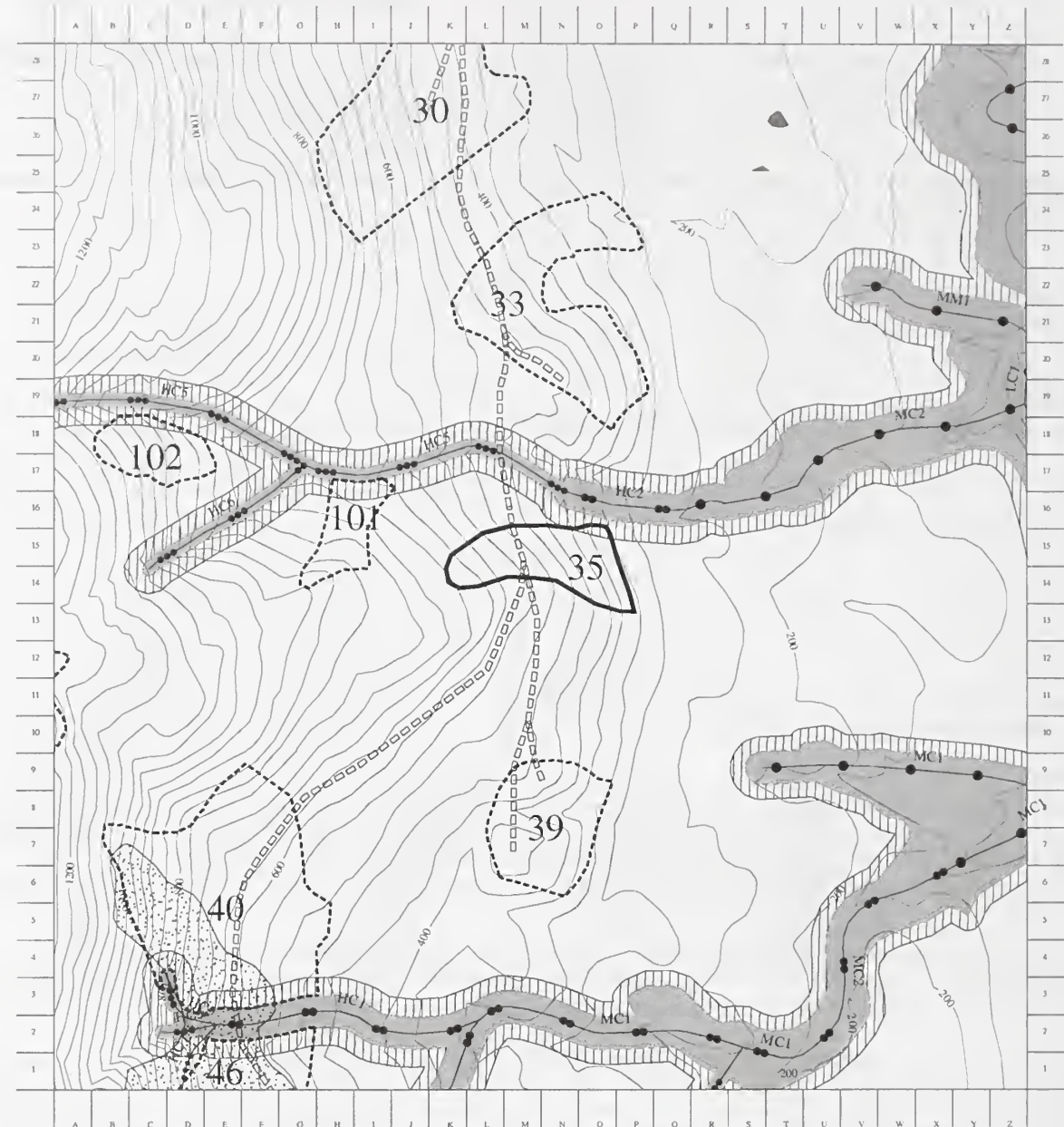
This unit is designed for short-span cable yarding.

WILDLIFE:

Marten Standards and Guidelines apply – leave 10-20 percent of original stand structure in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

Gravina Island Final EIS Unit:35

10 Acres Alternative(s): 2_3_4_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON -NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 A1 Grundy

MAP located: /s/files/office/gis/gravina/alan/units/grfeisp1_352_3_4_6.eps
AML located: /s/files/unit/km/timber/personal/a1/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	35	Planned Unit Acres:	10	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-104	Town/Range/Sect:	76S90E18
		Logging Systems:	short-span cable	Total Estimated Harvest Volume (CCF):		638	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II HC2 Northeast: 100-foot Standard and Guideline or greater buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: The stand contains productive western hemlock with large spruce scattered throughout. There are significant levels of windsnap damage in western hemlock. Severe frost damage was noted in several Sitka spruce. The overstory is composed of western hemlock, Sitka spruce, and western red cedar. The shrub layer consists of blueberry, devil's club, menziesia, and skunk cabbage.

Desired Future Condition: Stand will be even aged. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. This will reduce mistletoe, maximize economic return, and minimize risk of windthrow. Where possible, retain trees throughout the unit, particularly snags and near snags of large diameter.

SOILS:

No resource concerns were identified.

TIMBER:

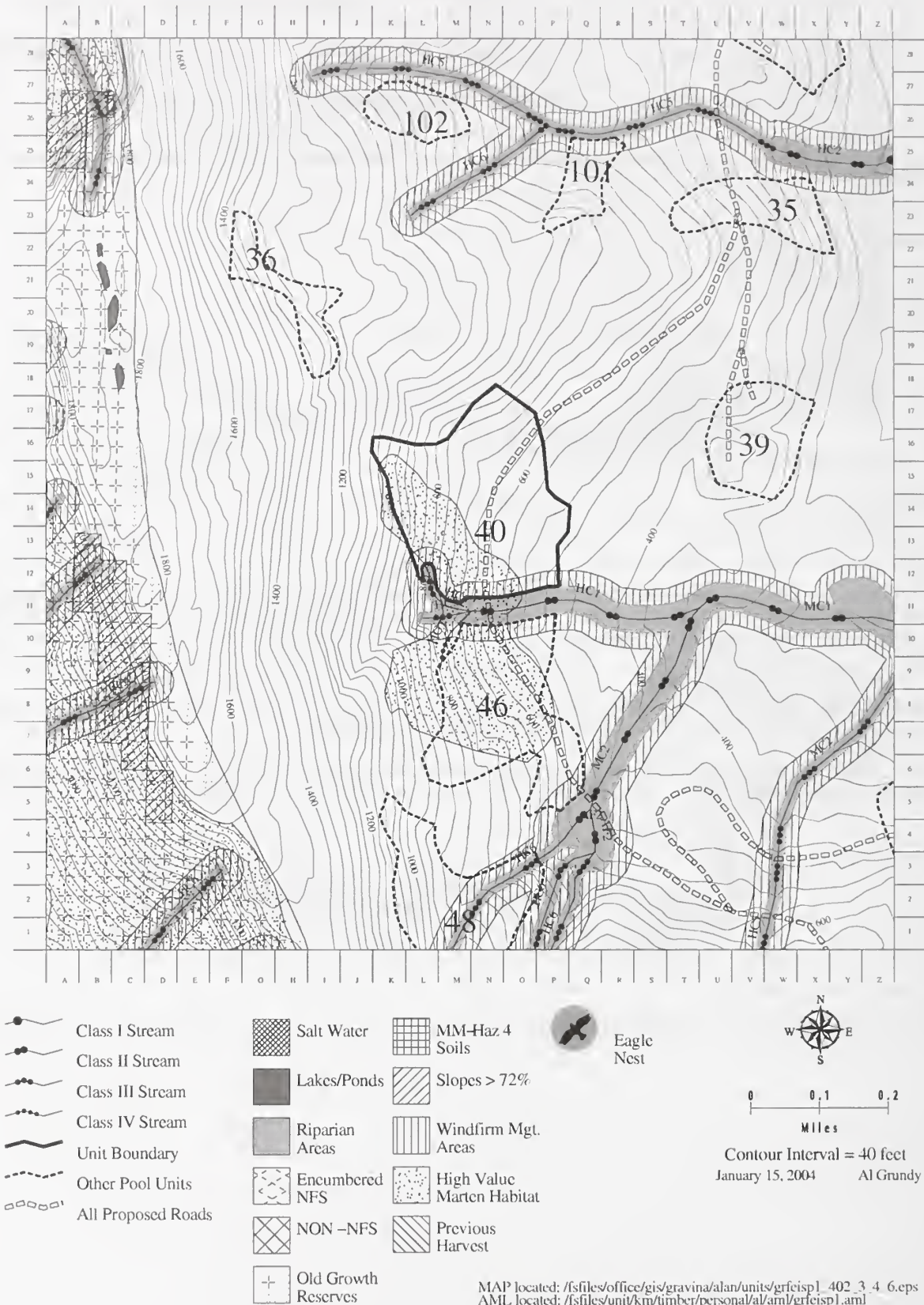
This unit is designed for short-span cable yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:40

37 Acres Alternative(s): 2_3_4_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	40	Planned Unit Acres:	37	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	198-63	Town/Range/Sect:	76S89E13
		Logging Systems:	short-span cable	Total Estimated Harvest Volume (CCF):		2,548	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class III HC5 Southwest: Sideslope Standard & Guideline buffer required.

Class II (TTRA) HC1 South: 100-foot Standard and Guideline or greater buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: The unit contains alternating bands of western hemlock, western red cedar, and Alaska yellow cedar forest and pure western hemlock forest. It has areas of severe mistletoe and high windthrow. The overstory is composed of western hemlock, Sitka spruce, western red cedar, and Alaska yellow cedar. The shrub layer consists of menziesia and blueberry.

Desired Future Condition: Stand will be predominantly even aged with some reserve clumps and scattered trees in the southwestern portion of unit. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. There is an area of high-value marten habitat within the unit, in the southwestern portion. Maintain 10-20 percent of the stand structure in this area. This prescription will reduce mistletoe, maximize economic return, and minimize risk of windthrow. If possible, retain trees throughout the unit, particularly snags and near snags of large diameter.

SOILS:

No resource concerns were identified.

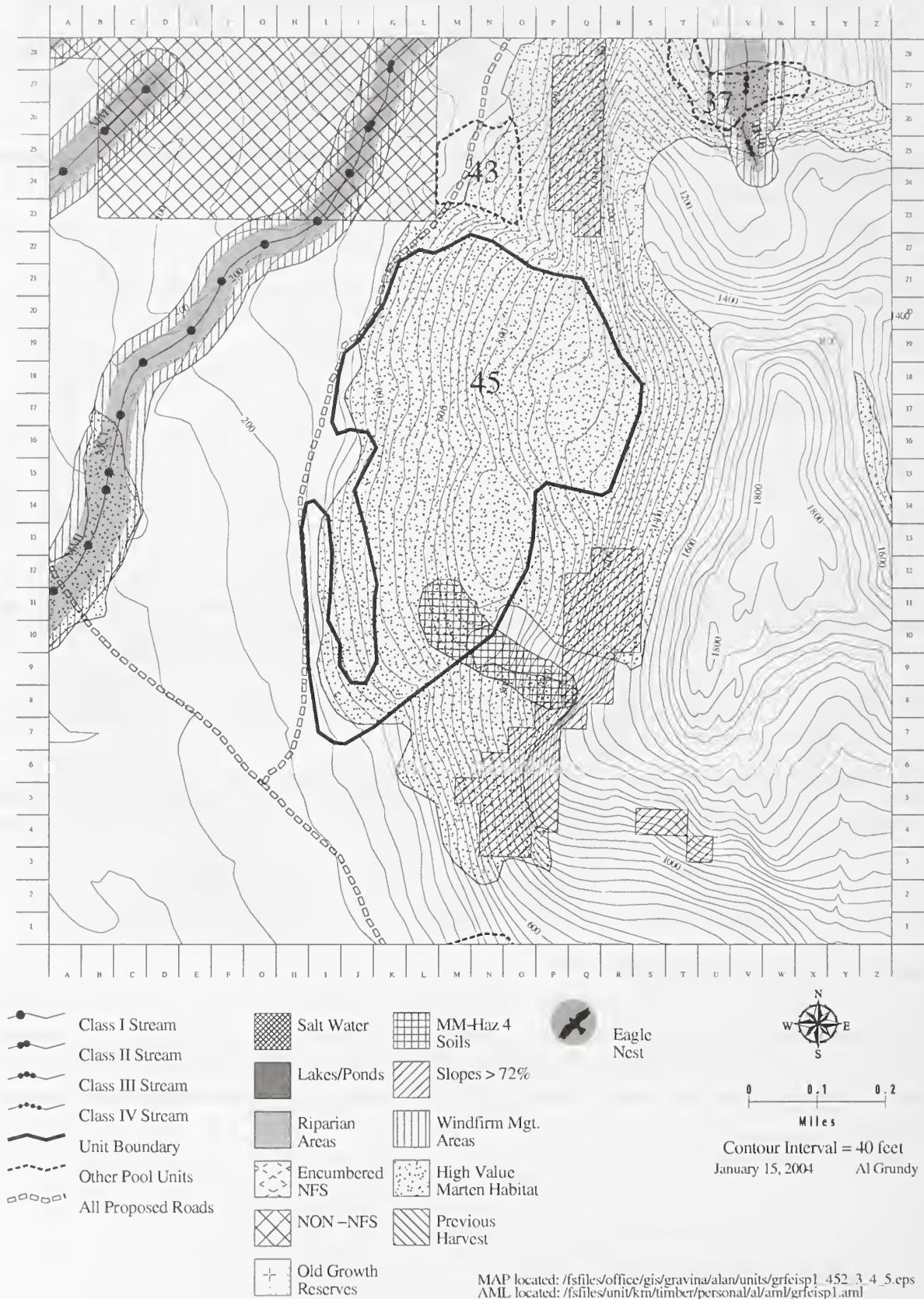
TIMBER:

This unit is designed for short-span cable yarding.

WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

Gravina Island Final EIS Unit:45 130 Acres Alternative(s): 2_3_4_5



Unit Data Card – Gravina Island Timber Sale

Unit Number:	45	Planned Unit Acres:	130	Silvicultural Prescription:	EACCR/ GS	In Alternatives:	2, 3, 4, 5
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-13	Town/Range/Sect:	76S90E21
		Logging Systems:	Is cable/ helicopter	Total Estimated Harvest Volume (CCF):		6,937	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

This unit is in the middleground on the northeast side of the bay and for the most part faces away from most of the bay. At least half of unit is visible from northwest corner of the inlet. Concentrate retention in the southern third of this unit that is most visible. Use group selection to create small patches or narrow corridors so the only evidence of harvest is scattered gaps in the canopy and some visible edges created by lines of tree trunks. A smaller amount of scattered retained trees in northern part of unit that is more oblique to the viewing positions will suffice. About 35-40 percent retention in the unit overall is adequate. Objective is to meet at least a Modification VQO.

SILVICULTURE:

Vegetation: Unit is dominated by western hemlock. It has a west aspect, a closed canopy, and a sparse understory. The dominant plant association is western hemlock/blueberry. Mistletoe occurs throughout the unit in moderate to severe infections. Windthrow potential is low overall with some areas of high potential.

Desired Future Condition: Stand will be managed as both even aged and uneven aged with windfirm reserve clumps and scattered trees. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply an even-aged clearcut with reserves prescription in northern half of unit (approximately 65 acres). Leave 10-20 percent of the stand structure, scattered and/or clumped, throughout the areas of high-value marten habitat in the northern half of the unit. Leave areas may be clumped in areas of oversteepened slopes and stream buffers to obtain windfirmness for reserve. Ensure that the small unstable section in the north-central portion of the unit is reserved from harvest to address soils concerns. Apply a group selection prescription (approximately 65 acres) in the southern half of the unit to address visual resource concerns. Harvest in small groups and/or strips, retaining approximately 50 percent of the original basal area of the stand. Openings will not exceed 2 acres and/or strips will be no wider than two times the average tree height.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that there is a small unstable section in the north central portion of the unit which will be reserved from harvest (BMPs 13.2, 13.5).

TIMBER:

This unit is designed for helicopter yarding in Alternative 5. In Alternatives 2, 3 and 4, the unit is designed for a combination of long-span cable yarding from the proposed road and helicopter yarding of the upper reaches.

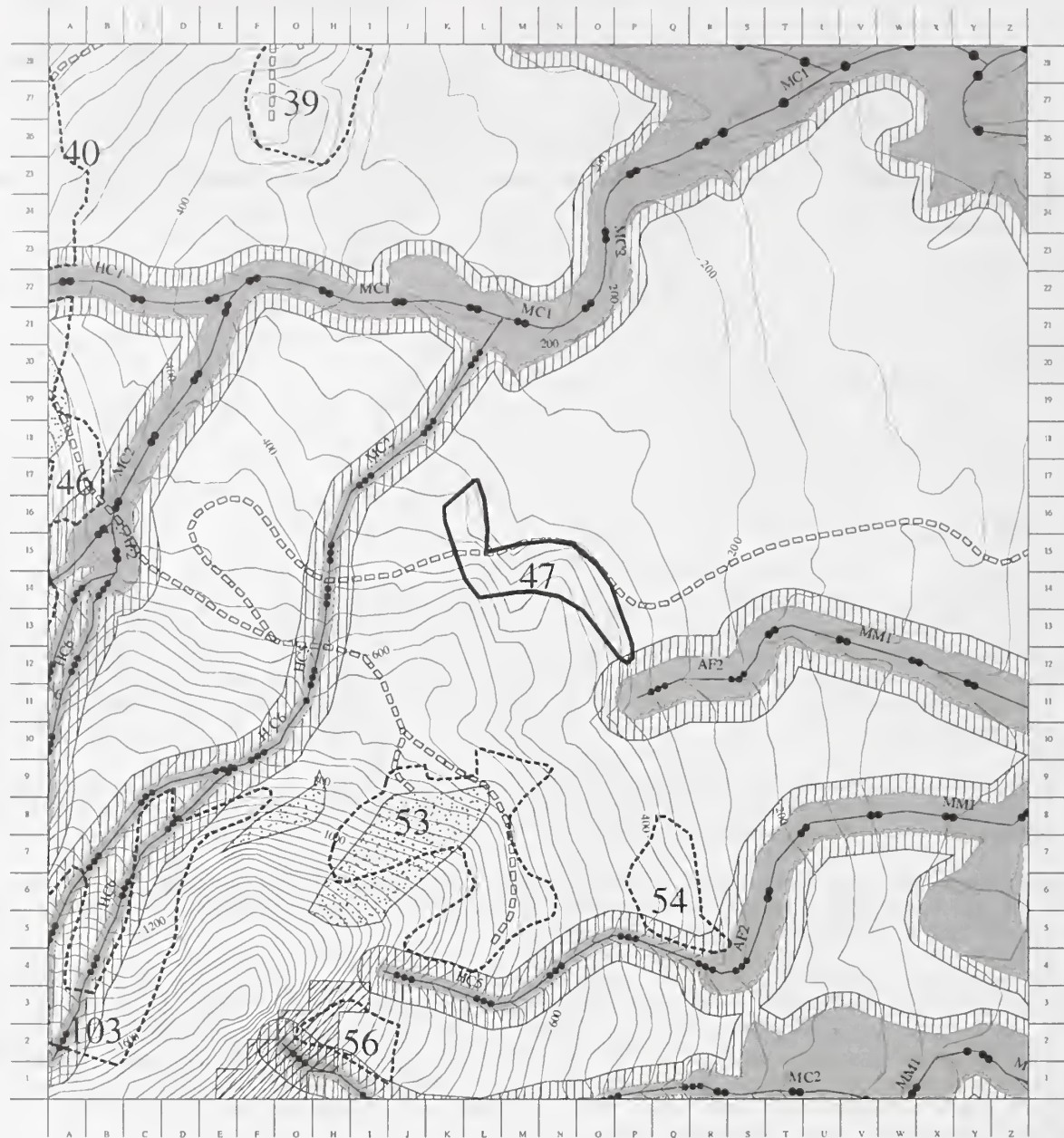
WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

In Alternative 5, this unit would be helicopter yarded. Interagency bald eagle MOU applies. Seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:47

11 Acres Alternative(s): 2_3_4_6



- | | | | | | |
|--|--------------------|--|---------------------|--|---------------------------|
| | Class I Stream | | Salt Water | | MM-Haz 4 Soils |
| | Class II Stream | | Lakes/Ponds | | Slopes > 72% |
| | Class III Stream | | Riparian Areas | | Windfirm Mgt. Areas |
| | Class IV Stream | | Encumbered NFS | | High Value Marten Habitat |
| | Unit Boundary | | NON -NFS | | Previous Harvest |
| | Other Pool Units | | Old Growth Reserves | | |
| | All Proposed Roads | | | | |



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_472_3_4_6.cps
AML located: /sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	47	Planned Unit Acres:	11	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-102	Town/Range/Sect:	76S90E19
		Logging Systems:	short-span cable	Total Estimated Harvest Volume (CCF):		625	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II AF2 Southeast: 140-foot Standard and Guideline or greater buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: This is a mixed cedar stand with areas of high defect and wind damage. The overstory is composed of western hemlock, western red cedar, and Alaska yellow cedar. The shrub layer consists of blueberry.

Desired Future Condition: Stand will be even-aged. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. This will reduce mistletoe and remove highly defected trees, maximize economic return, and minimize risk of windthrow, which is high within the unit. If possible, retain unmerchantable trees throughout the unit, particularly snags and near snags of large diameter.

SOILS:

No resource concerns were identified.

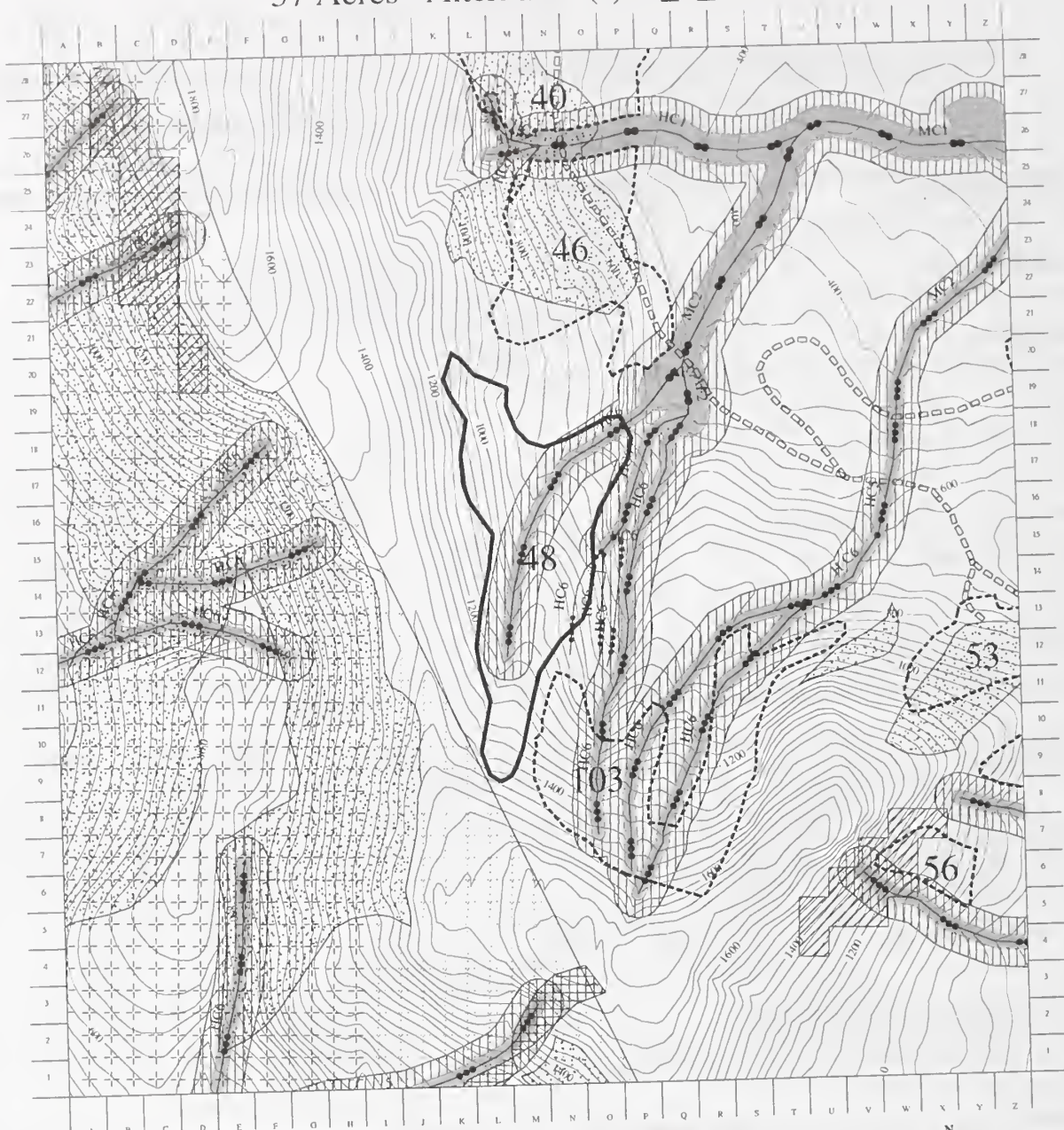
TIMBER:

This unit is designed for short-span cable yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:48 37 Acres Alternative(s): 2_3_4_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves

- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 A1 Grundy

MAP located: /s/files/office/gis/gravina/alan/units/grfeisp1_482_3_4_6.cps
AML located: /s/files/unit/km/umtber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	48	Planned Unit Acres:	37	Silvicultural Prescription:	STS	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	198-61	Town/Range/Sect:	76S89E24
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF): 1,128			

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class III HC6 center: Sideslope Standard and Guideline buffer required.

Class III HC6 Northeast: Sideslope Standard and Guideline buffer required.

Class IV HC6 East: Requires directional felling, partial, or full suspension.

Class II AF2 Northeast: 140 foot Standard and Guideline or greater buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Unit is a multi-cohort stand with a dying/decadent overstory of large western hemlock and Sitka spruce. The middle and understory are vigorous and dominated by western hemlock. Moderate to severe mistletoe infects the western hemlock. The dominant plant association is Sitka spruce/blueberry.

Desired Future Condition: Stand will have multiple canopy layers. Natural regeneration through release of established stems is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply a single-tree selection prescription, removing approximately 50 percent basal area, through individual tree marking. Favor the dying/decadent and mistletoe infected trees as selection for removal. A mix of tree species will be left to maintain original species composition. This prescription will address soil stability concerns.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that less than 2 acres of slopes greater than 72 percent are located in the northeastern corner of the unit near the Class III stream. The single-tree selection prescription will promote soil stability in this area (BMP 13.2).

TIMBER:

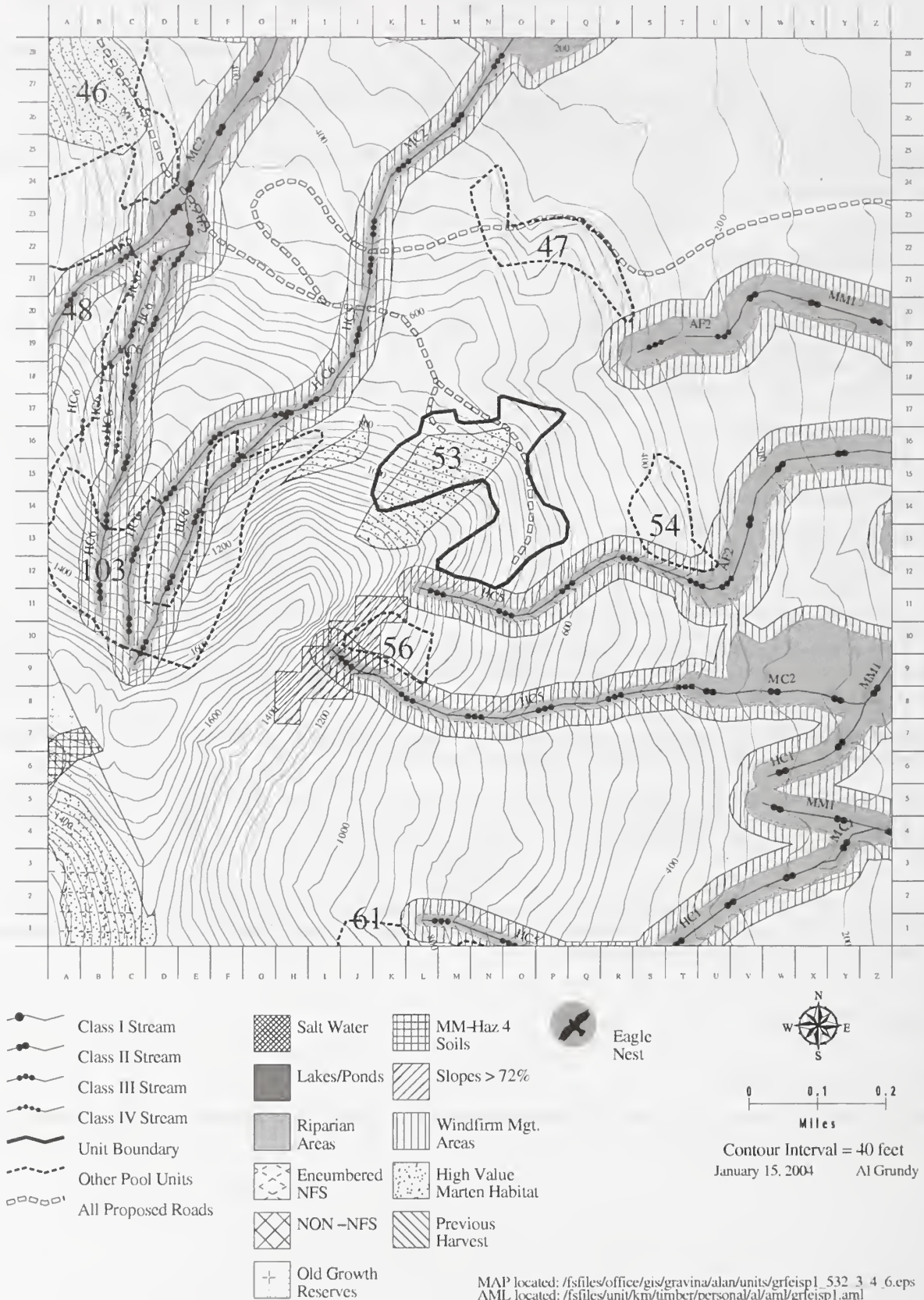
This unit is designed for helicopter yarding.

WILDLIFE:

No resource concerns were identified.

Gravina Island Final EIS Unit:53

25 Acres Alternative(s): 2_3_4_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	53	Planned Unit Acres:	25	Silvicultural Prescription:	CC	In Alternatives:	2, 3, 4, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-18	Town/Range/Sect:	76S90E19
		Logging Systems:	short-span cable	Total Estimated Harvest Volume (CCF): 1,539			

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class III HC5 South: Sideslope Standard and Guideline buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: This is a varied, highly wind-disturbed stand. The higher elevation section in the southeast is an almost pure, two-aged western hemlock stand. The rest of the unit transitions from low-productivity, mixed conifer forest type to western hemlock-western red cedar forest type. The overstory is composed of western hemlock, Sitka spruce, western red cedar, mountain hemlock, and Alaska yellow cedar. The shrub layer consists of blueberry, salal, and menziesia. Windthrow potential is estimated to be high.

Desired Future Condition: Stand will be even aged with some reserve clumps and scattered trees. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. There is an area of high-value marten habitat within the unit. Maintain 10-20 percent of the stand structure in this area. This prescription will reduce mistletoe, maximize economic return, and minimize risk of windthrow. The reserve areas may be clumped along stream buffers and steep slope areas to obtain windfirmness. If possible, retain unmerchantable trees throughout the unit, particularly snags and near snags of large diameter.

SOILS:

Slopes Greater than 72%: No slopes greater than 72 percent will be harvested.

TIMBER:

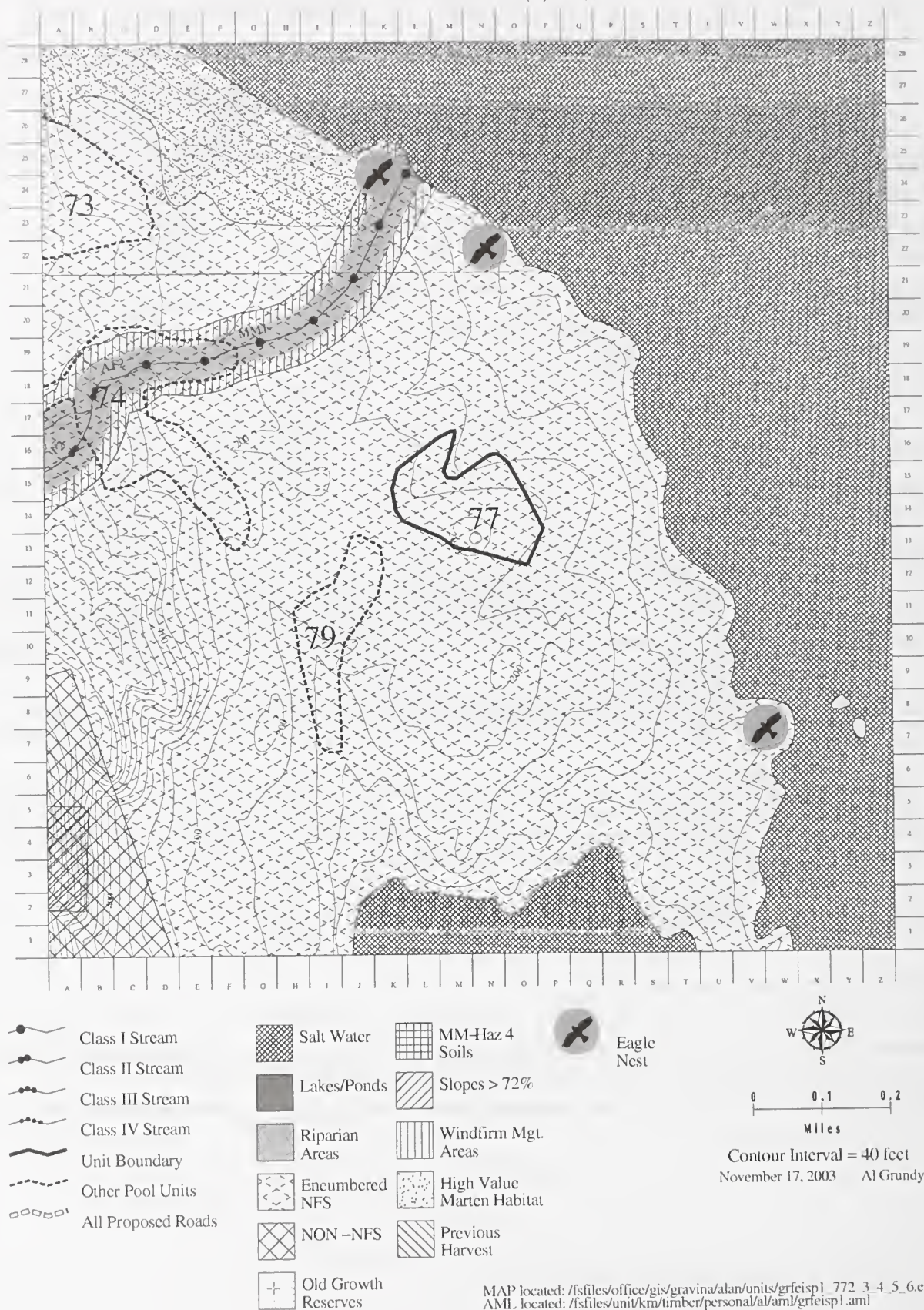
This unit is designed for short-span cable yarding.

WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

Gravina Island Final EIS Unit:77

16 Acres Alternative(s): 2_3_4_5_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	77	Planned Unit Acres:	16	Silvicultural Prescription:	2ACCR	In Alternatives:	2, 3, 4, 5, 6
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
		Primary WAA Number:	101	Photo:	298-22	Town/Range/Sect:	77S91E17
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):		572	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

This unit was not visited by the Forest Geologist; it was visited by other resource specialists and no karst resource concerns were noted. The Forest Geologist mapped similar strata near Bostwick Inlet, adjacent and immediately east of this unit, in summer 2003: although the underlying geologic strata contained minor thin-bedded carbonaceous limestone, no karst development was noted, and the strata primarily contained carbonaceous shale, thin limestone debris flows, sandstone, and conglomerate. Based on mapping of Berg (1973) and field reconnaissance during summer 2003, it was determined that karst development was unlikely in this unit. Because a small portion of the strata is calcareous, a designation of low vulnerability was given to this unit.

LANDS:

Encumbered lands.

RECREATION/SCENERY:

Since unit is on very gently rolling terrain, it is only slightly visible from Nichols Passage. 25-40 percent retention will be adequate to minimize impacts.

SILVICULTURE:

Vegetation: Overstory is dominated by western red cedar and western hemlock with a Sitka spruce and red alder component present. Severe mistletoe is present in most western hemlock. Topography is irregular with rolling hills and drainages.

Desired Future Condition: Stand will be managed as two-aged with windfirm reserve clumps and scattered trees. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a two-aged clearcut with reserves prescription. Retain trees either singly, in clumps, or in strips in a way so that the overall crown competition factor is 30 or greater. Concentrate the larger openings in the lower reaches where visuals are less of a concern. Favor mistletoe infected trees for selection for removal. Retain at least 2-3 western red cedar per acre to ensure retention of cedar as a species component. There will be approximately 40 percent basal area of the stand retained to accomplish the objective. T2

SOILS:

No resource concerns were identified.

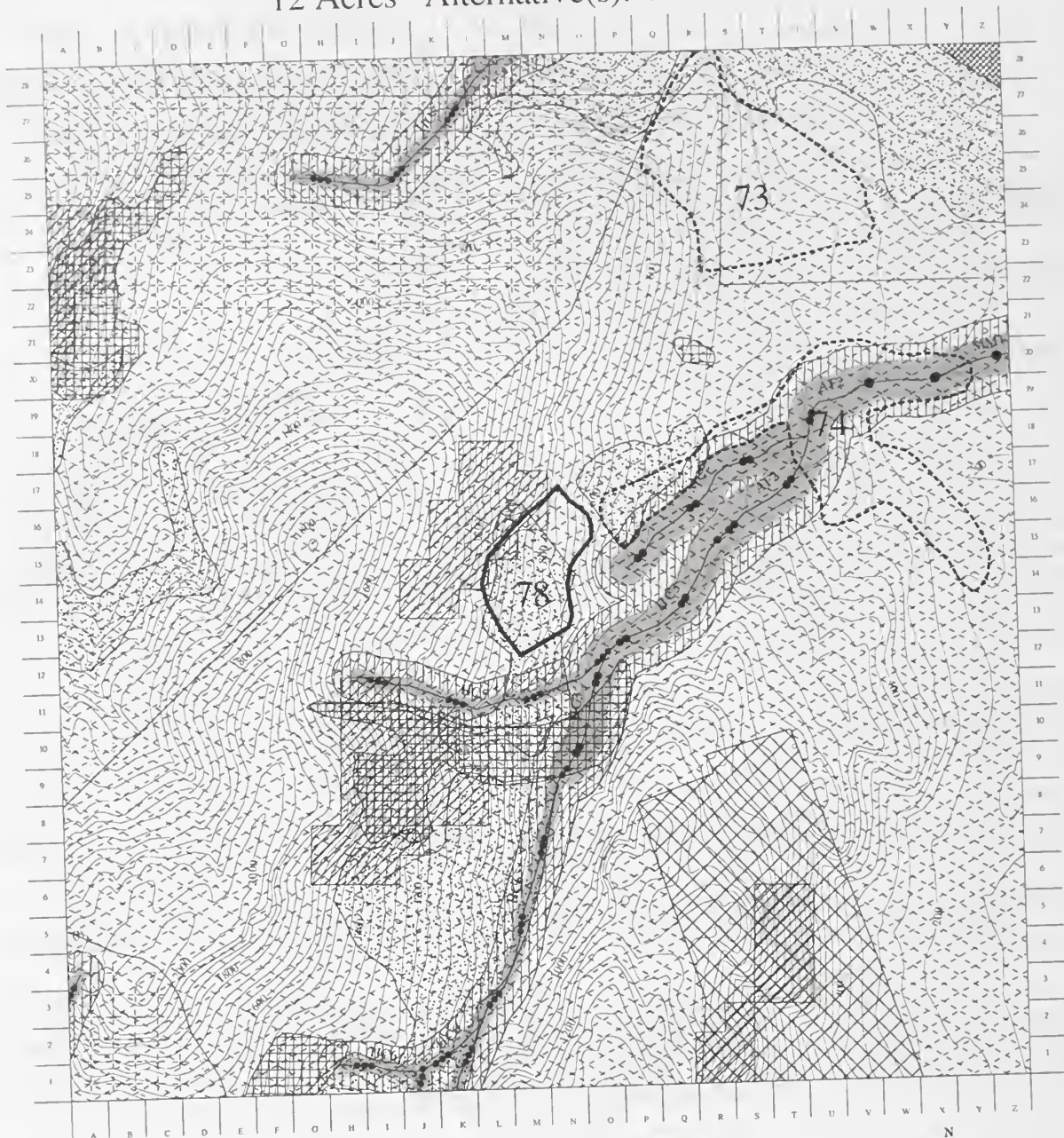
TIMBER:

This unit is designed for helicopter yarding.

WILDLIFE:

Unit is within 1/2 mile of known eagle nest and will be helicopter yarded. Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:78 12 Acres Alternative(s): 4



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz. 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 A1 Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_784.cps
AML located: /sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	78	Planned Unit Acres:	12	Silvicultural Prescription:	STS	In Alternatives:	4
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	298-22	Town/Range/Sect:	77S91E17
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF): 460			

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

No resource concerns were identified.

LANDS:

Encumbered lands.

RECREATION/SCENERY:

Unit visible on steep slope from Nichols Passage and mouth of Bostwick Inlet. Recommend a few narrow harvest corridors that would blend with natural landslide openings present around unit. Adopted VQO is partial retention.

SILVICULTURE:

Vegetation: Western hemlock dominates the overstory species (85 percent) with red alder as the next most abundant overstory species. Aspect is northeast and entire unit is visible from salt water. Mistletoe is present throughout the unit, but is more severe and concentrated in the eastern, lower reaches of the unit. Understory is dominated by blueberry and menziesia.

Desired Future Condition: Stand will have multiple canopy layers. Natural regeneration through release of established stems is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply a single-tree selection prescription, retaining approximately 50 percent basal area, either through individual tree marking or designation by description. Place in reserve approximately 5 acres of slopes greater than 72 percent in the northeastern portion of the unit. A mix of tree species will be left to maintain original species composition.

SOILS:

Slopes Greater than 72%: There are slopes greater than 72 percent in the northeastern portion of the unit. These slopes have been reserved from harvest (BMP 13.2, 13.5).

TIMBER:

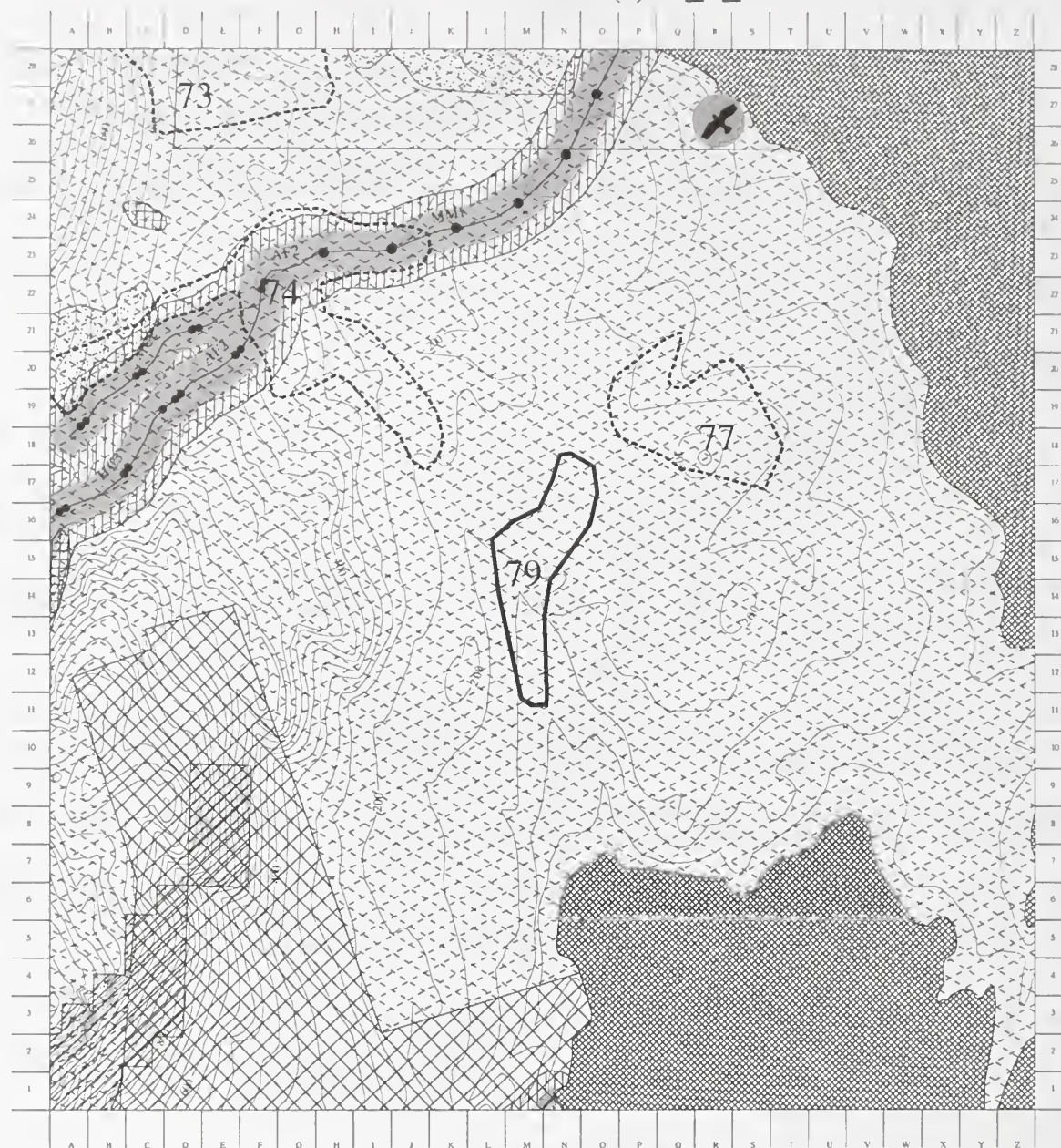
This unit is designed for helicopter yarding.

WILDLIFE:

Marten standards and guidelines apply – leave 10-20 percent of original stand structure
Interagency Bald Eagle MOU applies. Seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:79

12 Acres Alternative(s): 2_4_5



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON -NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /fsfiles/office/gis/gravina/alan/units/grfeisp1_792_4_5.eps
AML located: /fsfiles/unit/km/timber/personal/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	79	Planned Unit Acres:	12	Silvicultural Prescription:	CC	In Alternatives:	2, 4, 5
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
		Primary WAA Number:	101	Photo:	298-22	Town/Range/Sect:	77S91E17
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):		308	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Overstory is dominated by western red cedar (47 percent), mountain hemlock (20 percent) and western hemlock (21 percent) with a minor Sitka spruce component present. Moderately severe mistletoe is present in most western hemlock. Unit is located on a low elevation, broad flat and contains a draw in the south half. Mountain hemlock dominates the understory tree species.

Desired Future Condition: Stand will be even-aged with scattered trees where possible. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a clearcut prescription. This prescription will reduce mistletoe, maximize economic return, regenerate a healthy stand with less defect and minimize risk of windthrow. Where possible, retain unmerchantable trees throughout the unit, particularly cull western red cedar, snags and near snags of large diameter. The helicopter yarding system should enable protection of the other cohorts in the understory.

SOILS:

No resource concerns were identified.

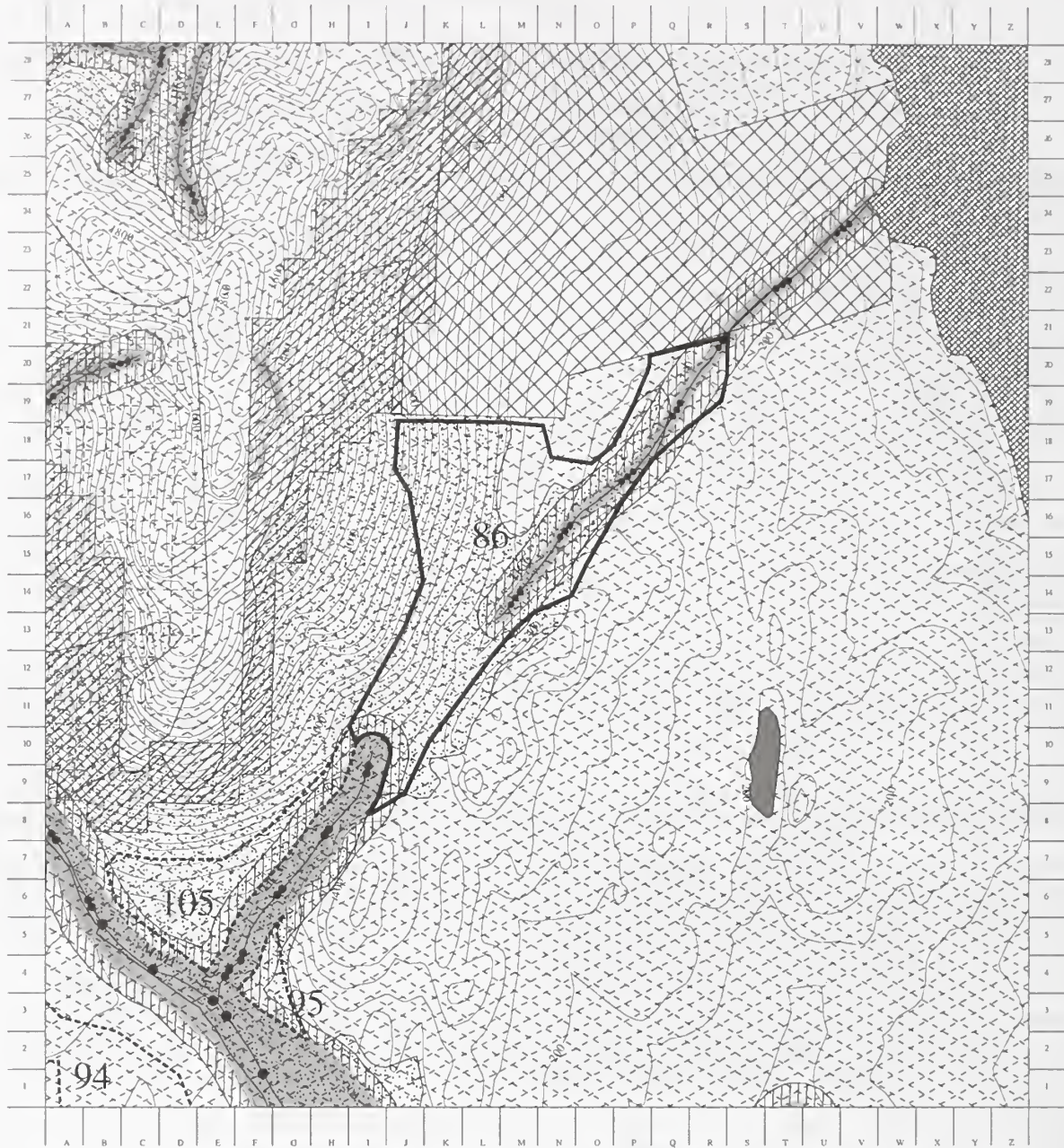
TIMBER:

This unit is designed for helicopter yarding.

WILDLIFE:

Unit is within 1/2 mile of known eagle nest and will be helicopter yarded. Interagency bald eagle MOU applies. Seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:86 57 Acres Alternative(s): 2_3_4_5_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle
Nest



Contour Interval = 40 feet
November 17, 2003 Al Grundy

MAP located: /sfiles/office/gis/gravina/alan/units/grfeisp1_862_3_4_5_6.eps
AML located: /sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	86	Planned Unit Acres:	57	Silvicultural Prescription:	2ACCR STS	In Alternatives:	2, 3, 4, 5, 6
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
		Primary WAA Number:	101	Photo:	298-24	Town/Range/Sect:	77S91E20
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF): 2,464			

HERITAGE RESOURCES:

Adjacent to historic mining features, none found during survey. Protect any undiscovered heritage features if located during harvest activities and notify archaeologist. H1, H2

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II (TTRA) HC3 Southwest: 100-foot Standard and Guideline or greater buffer required.
Class III HC6 Northeast: Sideslope Standard and Guideline buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

Encumbered lands (overselection by Cape Fox).

RECREATION/SCENERY:

Unit visible from Nichols Passage and Metlakatla. Maintain most of forested texture on steep western portion of unit with 2-acre openings, 50 percent retention. Adopted VQO is partial retention.

SILVICULTURE:

Vegetation: Unit is a mix of species including western hemlock, yellow cedar, Sitka spruce, and shore pine. The steeper slopes are well drained and better stocked. In the lower reaches there are areas of low site productivity.

Desired Future Condition: Stand will be managed as two-aged with windfirm reserve clumps and scattered trees along the lower, eastern half of unit. In the upper regions, where visuals are a concern, the stand will have multiple canopy layers, resulting in an uneven-aged stand. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a two-aged clearcut with reserves prescription on the lower, eastern reaches (approximately 36 acres). In this area, retain trees either singly, in clumps, or in strips in a way so that the overall crown competition factor is 30 or greater. In the upper, western portion of the stand, apply a single-tree selection prescription (approximately 21 acres), retaining approximately 50 percent basal area, either through individual tree marking or designation by description. A mix of species will be left to maintain original species composition. Place the oversteepened slopes in the northwestern corner of the unit in reserve to maintain slope stability.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that slopes up to 80 percent are suitable for harvest. Slopes over 80 percent will be reserved from harvest (BMP 13.5). About 25 acres of slopes greater than 72 percent will be harvested.

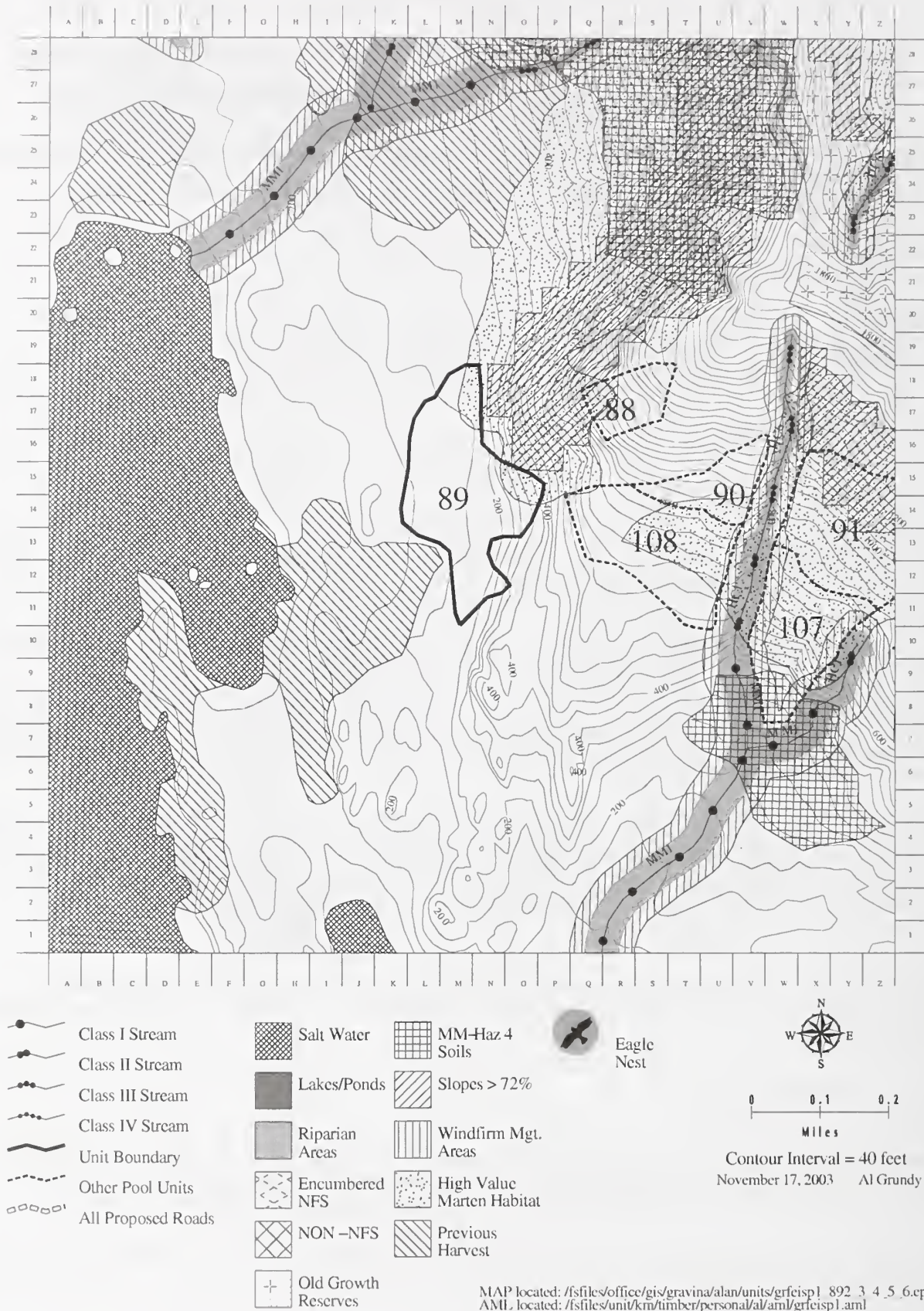
TIMBER:

This unit is designed for helicopter yarding.

WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh). Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:89 25 Acres Alternative(s): 2_3_4_5_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	89	Planned Unit Acres:	25	Silvicultural Prescription:	2ACCR STS	In Alternatives:	2, 3, 4, 5, 6
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76201
		Primary WAA Number:	101	Photo:	298-92	Town/Range/Sect:	77S90E24
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):		814	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

Carbonaceous shale with thin carbonaceous limestone interbeds is visible on the upper slopes of the eastern portion of the unit. The upper slope and back-line of the unit is bounded by cliffs. Several talus caves were located in these cliffs. These may be the caves reported in a memo by members of the Glacier Grotto to the USFS during scoping. Slopes in this unit range from <10-90 percent. No collapsed karst features were seen in or adjacent to the proposed harvest unit. Very small springs issuing from the lower contact of the carbonaceous limestone interbed in the carbonaceous shale were found in the eastern portion of the unit. The karst vulnerability of this unit is classified as low. Partial suspension is required on the talus slopes and carbonate areas in the eastern portion of the unit. The talus caves along the eastern portion of the harvest unit require a minimum 100-foot no-harvest buffer.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Recreation Concern: This unit is within 1 mile of the Phocena Bay cabin, which is used during the timeframe of harvest. With a log barge and helicopter traffic in Phocena Bay, recreation use of this area will be affected.

Recreation Mitigation: Specify timber harvest timeframe during early spring or late fall. Close the cabin to public use during harvest activities. Use local publications and the reservation system to notify the public of harvest activities.

Visuals: Eastern corner of unit sits on lower portion of steep slope above Phocena Bay and just below Unit 88. Recommend a few small 2-acre openings that blend with several natural openings surrounding this unit. 50 percent retention. Adopted VQO is partial retention.

SILVICULTURE:

Vegetation: The overstory is composed of western hemlock, Sitka spruce, western red cedar, and red alder. The shrub layer consists of blueberry, red alder, and salal. The very western edge consists of western red cedar forest, dominated by large, cull cedar trees and small, heavily mistletoe-infected western hemlock in the second story. Windthrow potential is estimated to be moderate to high.

Desired Future Condition: Stand will be managed as two-aged with windfirm reserve clumps and scattered trees along the lower, western 3/4 of unit. In the upper regions, where visuals are a concern, the stand will have multiple canopy layers, resulting in an uneven-aged stand. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a two-aged clearcut with reserves prescription to the lower, western reaches (approximately 21 acres). In this area, retain trees either singly, in clumps, or in strips in a way so that the overall crown competition factor is 30 or greater. Target the cull red cedar and mistletoe-infected trees for removal. In the upper, eastern portion of the stand, apply a single-tree selection prescription (approximately 4 acres), retaining approximately 70 percent basal area, through individual tree marking. This prescription will address soils and visual concerns. A mix of species will be left to maintain original species composition.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that soil stability concerns will be addressed by retaining 70 percent basal area in the eastern part of the unit (BMPs 13.2, 13.5). About 3 acres of slopes greater than 72 percent will be harvested.

TIMBER:

This unit is designed for helicopter yarding.

WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:92 5 Acres Alternative(s): 3_4_5_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: //sfiles/office/gis/gravina/alan/units/grfeisp1_923_4_5_6.eps
AML located: //sfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	92	Planned Unit Acres:	5	Silvicultural Prescription:	STS	In Alternatives:	3, 4, 5, 6
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
		Primary WAA Number:	101	Photo:	198-105	Town/Range/Sect:	77S90E24
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):			163

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

The unit is underlain by light-gray slaty limestone. Slopes adjacent to and within the harvest unit that are underlain by limestone range from 30-90 percent. The majority of this unit lies on an earthflow deposit at the confluence of several debris torrents that have failed or are continuing to fail. Limestone is visible only in the V-notches associated with the streams and debris flows. Epikarst development is shallow to non-existent on the steeper slopes and is sometimes visible at the surface. The karst vulnerability of these units is classified as moderate. Partial suspension is required.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Recreation Concern: This unit is within 1 mile of the Phocena Bay cabin, which is used during the timeframe of harvest. With a log barge and helicopter traffic around Phocena Bay or Nehenta Bay, recreation use of this area may be affected.

Recreation Mitigation: Specify timber harvest timeframe during early spring or late fall. Close the cabin to public use during harvest activities. Use local publications and the reservation system to notify the public of harvest activities.

Scenery: Adopted VQO is partial retention. Units 90-93 are highly visible from boat route along west side of Gravina and portions of them visible from Phocena Bay. Because of large size of proposed treatment area, maintain most of forested texture by individual tree selection or small group selection (2 acre). 60 percent retention.

SILVICULTURE:

Vegetation: Unit is a small, steep unit that lies in a wind-protected bowl. It is a well-stocked stand comprised of western hemlock and Sitka spruce trees fairly evenly spaced throughout the unit. Understory is dominated by blueberry. There are no mistletoe, insect, or disease problems.

Desired Future Condition: Future stand will have multiple canopy layers with different cohorts resulting in an uneven-aged stand. Overall stand will be uneven-aged. 60 percent of the stand will be retained to meet visual quality objectives and to provide slope stability. Natural regeneration through release of established stems is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply a single-tree selection prescription, retaining approximately 60 percent basal area through individual tree marking. Favor windfirm trees in selection for retention. A mix of tree species will be left to maintain original species composition.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that partial harvest retaining approximately 60 percent of the basal area will address slope stability concerns by retaining rooting strength and snow intercept (BMP 13.2). No slopes greater than 72 percent will be harvested.

TIMBER:

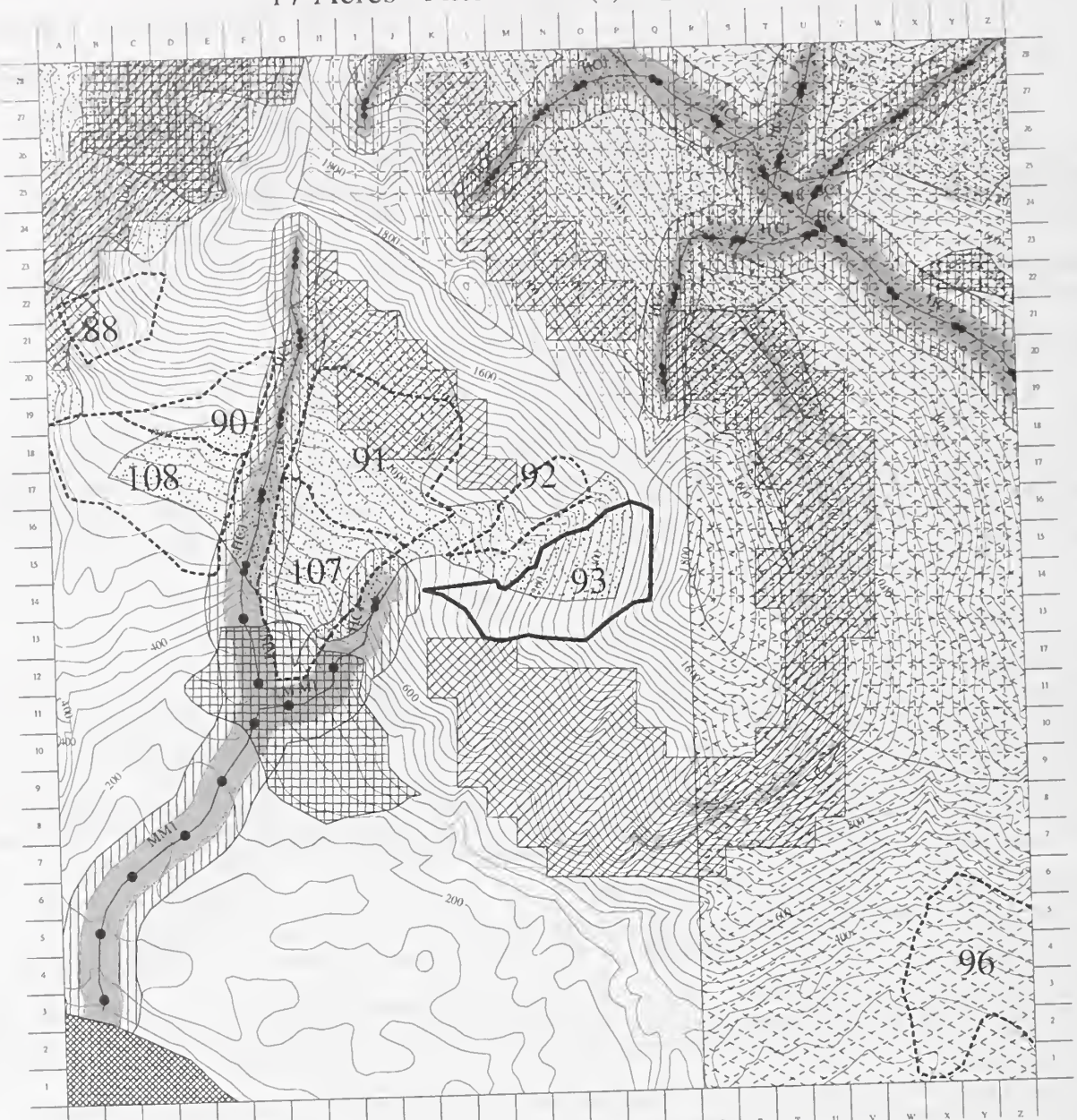
This unit is designed for helicopter yarding.

WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:93 17 Acres Alternative(s): 3_4_5_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /s/files/office/gis/gravina/alan/units/grfeisp1_933_4_5_6.eps
AML located: /s/files/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	93	Planned Unit Acres:	17	Silvicultural Prescription:	STS	In Alternatives:	3, 4, 5, 6
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
		Primary WAA Number:	101	Photo:	298-92	Town/Range/Sect:	77S90E24
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):			574

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II (TTRA) HC1 West: 100-foot Standard and Guideline or greater buffer required.

GEOLOGY:

The unit is underlain by light-gray slaty limestone. Slopes adjacent to and within the harvest unit that are underlain by limestone range from 30-90 percent. The northern lobe of this unit (old Unit 92) lies on an earthflow deposit at the confluence of several debris torrents that have failed or are continuing to fail. Limestone is visible only in the V-notches associated with the streams and debris flows. Epikarst development is shallow to non-existent on the steeper slopes and is sometimes visible at the surface. The karst vulnerability of these units is classified as moderate. Partial suspension is required.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Recreation Concern: This unit is within 1 mile of the Phocena Bay cabin, which is used during the timeframe of harvest. With log barge and helicopter traffic around Phocena Bay, recreation use of this area may be affected.

Recreation Mitigation: Specify timber harvest timeframe during early spring or late fall. Close the cabin to public use during harvest activities. Use local publications and the reservation system to notify the public of harvest activities.

Visuals: Adopted VQO is partial retention. Units 90-93 are highly visible from boat route along west side of Gravina and portions of them are visible from Phocena Bay. Because of large size of proposed treatment area, maintain most of forested texture by individual tree selection or small group selection (2 acre). Approximately 60 percent retention.

SILVICULTURE:

Vegetation: Stand is dominated by western hemlock. Area displays a history of wind disturbance, which is estimated to be moderate to high. Understory is sparse, dominated by blueberry. Abundant mountain hemlock above the 1,500' elevation line. There were no mistletoe, insects or disease problems noted.

Desired Future Condition: Stand will have multiple canopy layers. Natural regeneration through release of established stems is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply a single-tree selection prescription, retaining approximately 60 percent basal area, through individual tree marking. A mix of tree species will be left to maintain original species composition. Favor windfirm trees in selection for retention.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that soils above 1,600 feet may be unstable. Therefore, the eastern unit boundary has been placed no higher than 1,600 feet to exclude unstable slopes (BMPs 13.2, 13.5). No slopes over 72 percent will be harvested.

TIMBER:

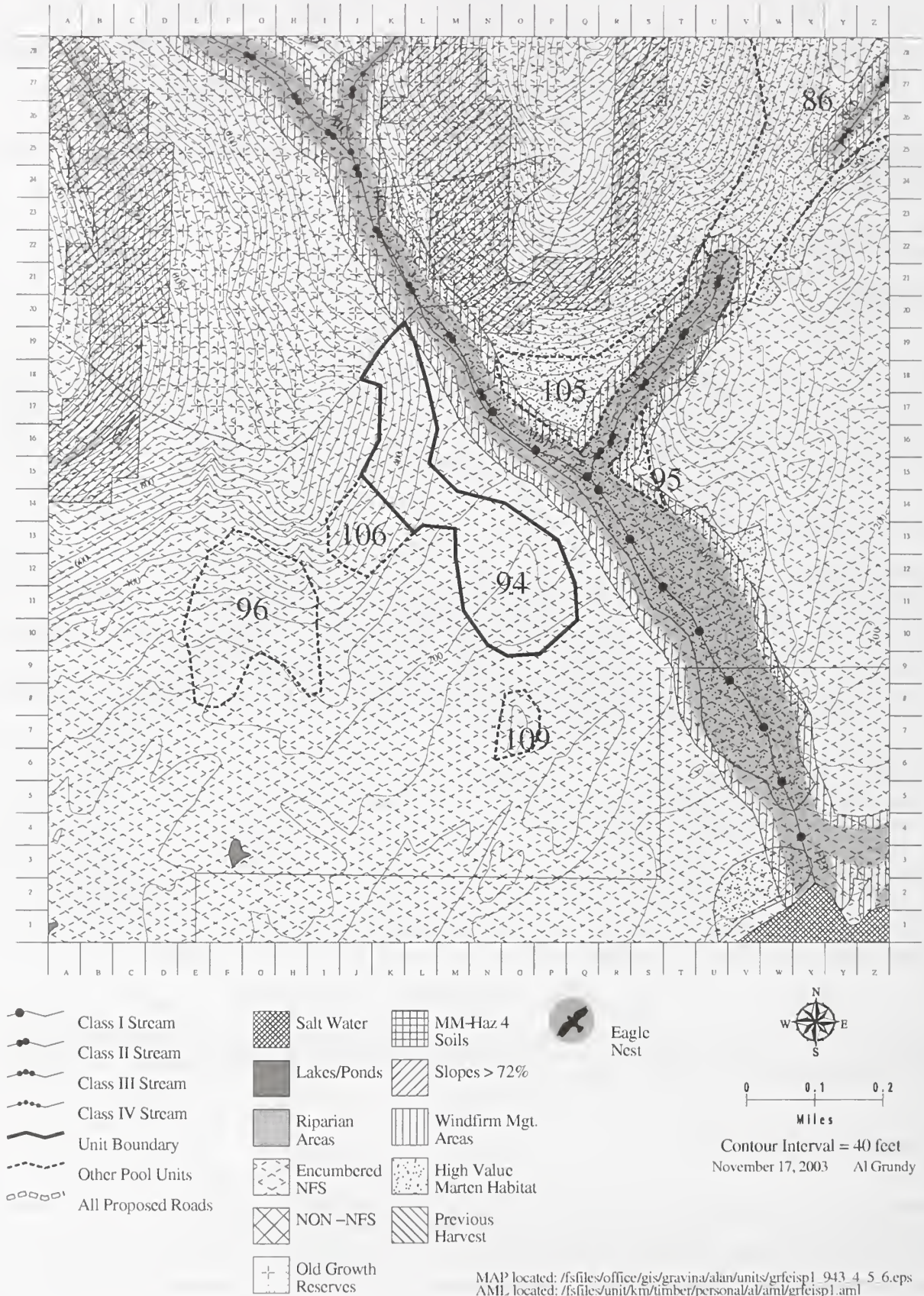
This unit is designed for helicopter yarding.

WILDLIFE:

Marten Standards and Guidelines apply: leave 10-20 percent of original stand structure, in areas of high-value marten habitat, averaging 4 large trees/acre (20-30" dbh), 3 snags/acre, and 3 large, downed trees/acre (20-30" dbh).

Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:94 35 Acres Alternative(s): 3_4_5_6



Unit Data Card – Gravina Island Timber Sale

Unit Number:	94	Planned Unit Acres:	35	Silvicultural Prescription:	2ACCR STS	In Alternatives:	3, 4, 5, 6
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
		Primary WAA Number:	101	Photo:	198-106	Town/Range/Sect:	77S91E30
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):		1,002	

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class II HC3 Northeast: 100-foot Standard and Guideline or greater buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Unit is visible from Nichols Passage and Metlakatla. Maintain forested texture in northwest steeper portion of unit by creating 2-acre openings. Retain about 40 percent of stand, most of it in this more visible portion. Adopted VQO is partial retention.

SILVICULTURE:

Vegetation: Unit is convex in shape with the lower, southeastern forest type characterized by shore pine cover, heavy salal, open canopy, and rolling topography. The northwestern portion of the unit is steeper with well-drained soils, western hemlock, and a sparse understory. Stand structure in the northwest is characterized by two canopy layers of western hemlock. The second cohort is approximately 10-15 feet tall. Mistletoe, particularly in the northwest portion of the unit, is prevalent throughout.

Desired Future Condition: Stand will be managed as two-aged with windfirm reserve clumps and scattered trees along the lower half of unit on the gentle, rolling terrain. In the upper regions, where visuals are a concern, the stand will have multiple canopy layers, resulting in an uneven-aged stand. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a two-aged clearcut with reserves prescription in the lower, southeastern reaches (approximately 22 acres). In this area, retain trees either singly, in clumps, or in strips in a way so that the overall crown competition factor is 30 or greater. There will be approximately 30-40 percent of the stand basal area retained to accomplish the objective. In the upper, steeper northwestern portion of the stand (approximately 13 acres), apply a single-tree selection prescription, retaining approximately 50 percent basal area through individual tree marking. Favor mistletoe-free trees for selection for retention. Use of a single-tree selection prescription will address visual and slope stability concerns. A mix of species will be left to maintain original species composition.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that windthrow in the northwestern section of the unit may pose a threat to soil stability. To mitigate this concern, the single-tree selection prescription will keep openings small (BMP 13.5). Approximately 8 acres of slopes greater than 72 percent will be harvested.

TIMBER:

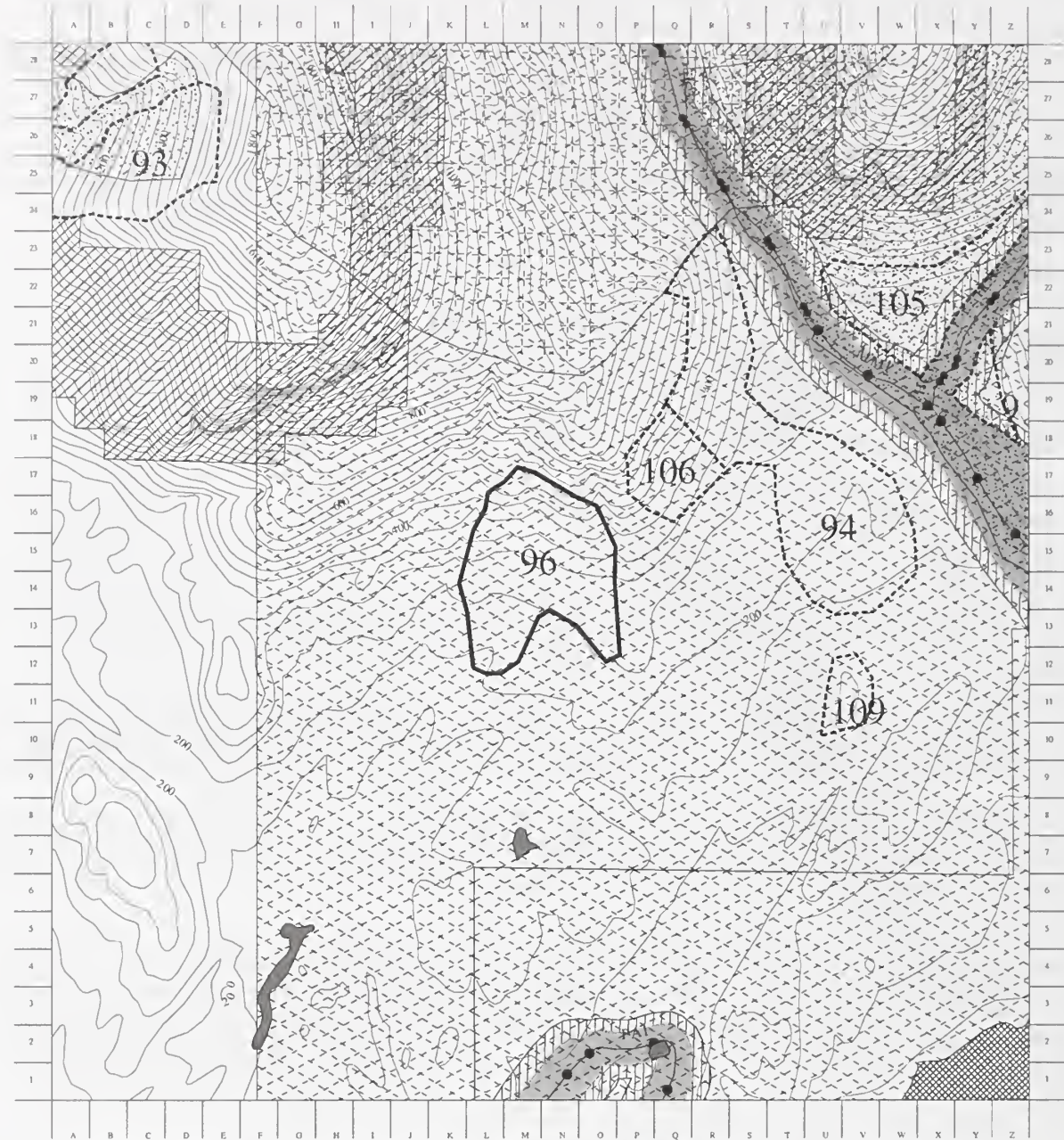
This unit is designed for helicopter yarding.

WILDLIFE:

Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:96

23 Acres Alternative(s): 4_5



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



0 0.1 0.2
Miles

Contour Interval = 40 feet
November 17, 2003 Al Grundy

MAP located: /fsfiles/office/gis/gravina/alan/units/grfcisp1_964_5.eps
AML located: /fsfiles/unit/km/timber/personal/al/aml/grfcisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	96	Planned Unit Acres:	23	Silvicultural Prescription:	2ACCR STS	In Alternatives:	4, 5
LUD:	SV			Quad:	KTNA6NE	VCU Number:	76501
	Primary WAA Number:	101	Photo:	198-106	Town/Range/Sect:	77S91E30	
	Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):	669			

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

No resource concerns were identified.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

Unit is visible from Nichols Passage and Metlakatla. Maintain forested texture in northern steeper portion of unit by creating 2-acre openings. Retain about 50 percent of stand, most of it in this more visible portion. Adopted VQO is partial retention.

SILVICULTURE:

Vegetation: Unit is well drained, two cohort, with western hemlock and Sitka spruce in the upper reaches. The forest type transitions to western hemlock-western red cedar in the lower reaches with large, cull western red cedar in the overstory and smaller diameter western hemlock and Sitka spruce underneath. Canopy closure is varied throughout. A Pacific yew tree was found within unit.

Desired Future Condition: Stand will be managed as two-aged with windfirm reserve clumps and scattered trees along the lower, southern, gently sloping portion of unit. In the upper regions, where visuals are a concern, the stand will have multiple canopy layers, resulting in an uneven-aged stand. Natural regeneration is expected to be abundant. Future treatments may include pre-commercial thinning at age 15-25 to promote tree growth and species diversity.

Treatment: Apply a two-aged clearcut with reserves prescription to the lower, southern reaches (approximately 12 acres) of the unit. In this area, retain trees either singly, in clumps, or in strips in a way so that the overall crown competition factor is 30 or greater. There will be approximately 30-40 percent of the stand basal area retained to accomplish the objective. In the upper, northern portion of the stand (approximately 11 acres), apply a single-tree selection prescription, retaining approximately 50 percent basal area, to address visual concerns, through individual tree marking. A mix of species will be left to maintain original species composition. Flag and document any yew trees found during layout. Implement a site-specific silvicultural prescription that will maintain the Pacific yew's regeneration capabilities on site.

SOILS:

No resource concerns were identified.

TIMBER:

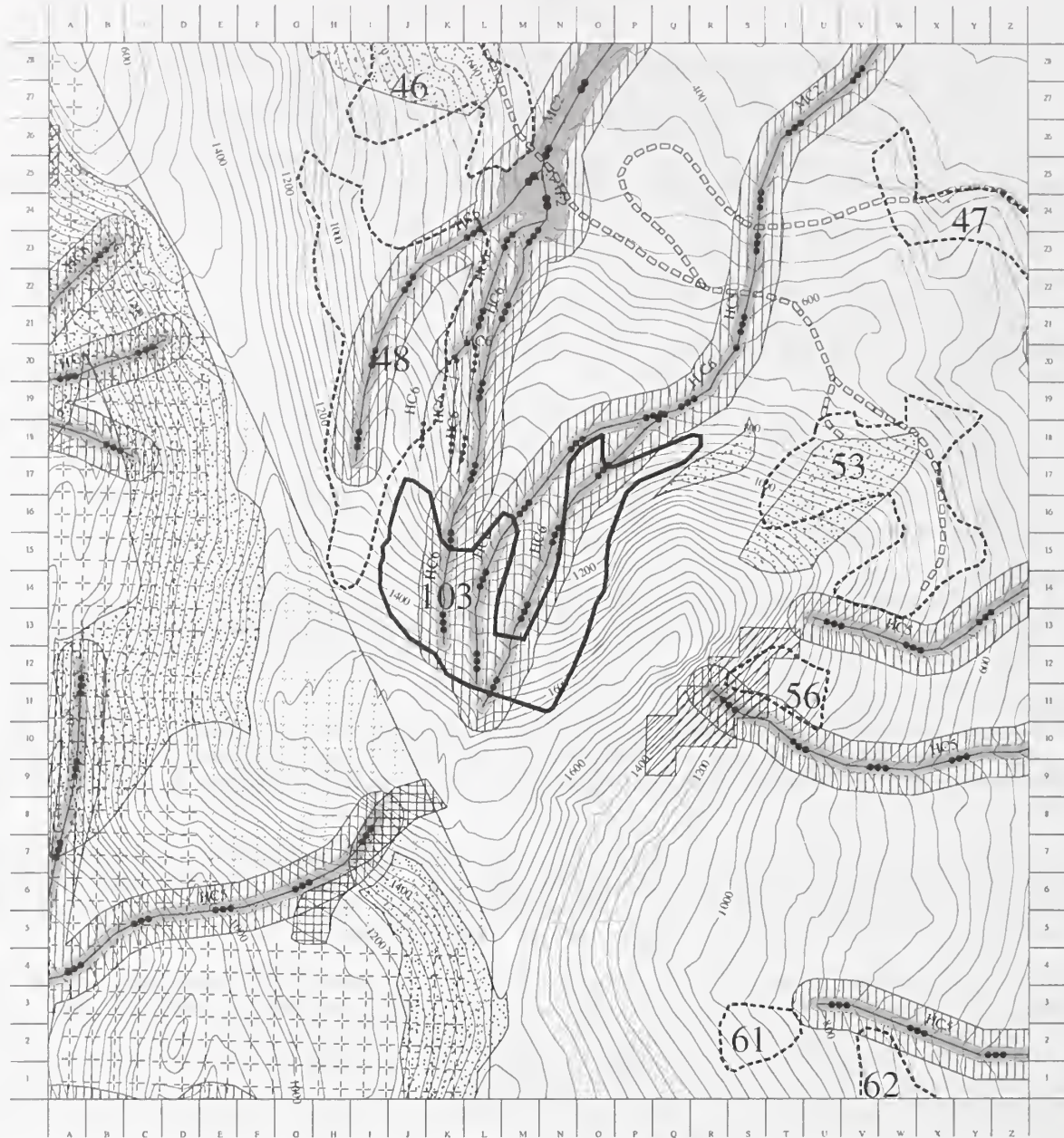
This unit is designed for helicopter yarding.

WILDLIFE:

Interagency bald eagle MOU applies. There is a seasonal restriction on repeated helicopter flights within 1/4 mile of active nests.

Gravina Island Final EIS Unit:103

34 Acres Alternative(s): 2_3_6



- Class I Stream
- Class II Stream
- Class III Stream
- Class IV Stream
- Unit Boundary
- Other Pool Units
- All Proposed Roads

- Salt Water
- Lakes/Ponds
- Riparian Areas
- Encumbered NFS
- NON-NFS
- Old Growth Reserves
- MM-Haz 4 Soils
- Slopes > 72%
- Windfirm Mgt. Areas
- High Value Marten Habitat
- Previous Harvest



Eagle Nest



0 0.1 0.2
Miles

Contour Interval = 40 feet
January 15, 2004 Al Grundy

MAP located: /fsfiles/office/gis/gravina/alan/units/grfeisp1 1032_3 6.cps
AML located: /fsfiles/unit/km/timber/personal/al/aml/grfeisp1.aml

Unit Data Card – Gravina Island Timber Sale

Unit Number:	103	Planned Unit Acres:	34	Silvicultural Prescription:	STS	In Alternatives:	2, 3, 6
LUD:	TP			Quad:	KTNB6SE	VCU Number:	76301
		Primary WAA Number:	101	Photo:	198-61	Town/Range/Sect:	76S89E24
		Logging Systems:	helicopter yarding	Total Estimated Harvest Volume (CCF):			1,115

HERITAGE RESOURCES:

No resource concerns were identified.

ENGINEERING/ROADS:

No resource concerns were identified.

FISH/WATERSHED:

Class III HC6 Central: Sideslope Standard and Guideline buffer required.

Class III HC6 Northeast to Southeast: Sideslope Standard and Guideline buffer required.

Class III HC6 West: Sideslope Standard and Guideline buffer required.

GEOLOGY:

No resource concerns were identified.

LANDS:

No resource concerns were identified.

RECREATION/SCENERY:

No resource concerns were identified.

SILVICULTURE:

Vegetation: Upper portion of unit has a dominant overstory of western/mountain hemlock and a small Sitka spruce component. Understory is filled with salmonberry and devil's club. The lower portion of the unit transitions to a western hemlock/western red cedar forest. The overstory is decadent with many large, dead/dying trees. There are large, scattered boulders throughout entire unit. Mistletoe is light to moderate. Windthrow is estimated to be low.

Desired Future Condition: Stand will have multiple canopy layers. Natural regeneration through release of established stems is expected to be abundant. Possible future treatment may include a release cutting.

Treatment: Apply a single-tree selection prescription, removing approximately 50 percent basal area, through individual tree marking. Target the dead/dying trees first when selecting trees for removal. Approximately 1 acre of slopes greater than 72 percent in the northern portion of the unit will have all trees retained. A mix of tree species will be left to maintain original species composition. This prescription will help promote soil stability throughout the unit.

SOILS:

Slopes Greater than 72%: The results of an on-site soil stability investigation determined that slopes greater than 72 percent in the northern part of the unit will be reserved from harvest to avoid potentially unstable soils (BMPs 13.2, 13.5).

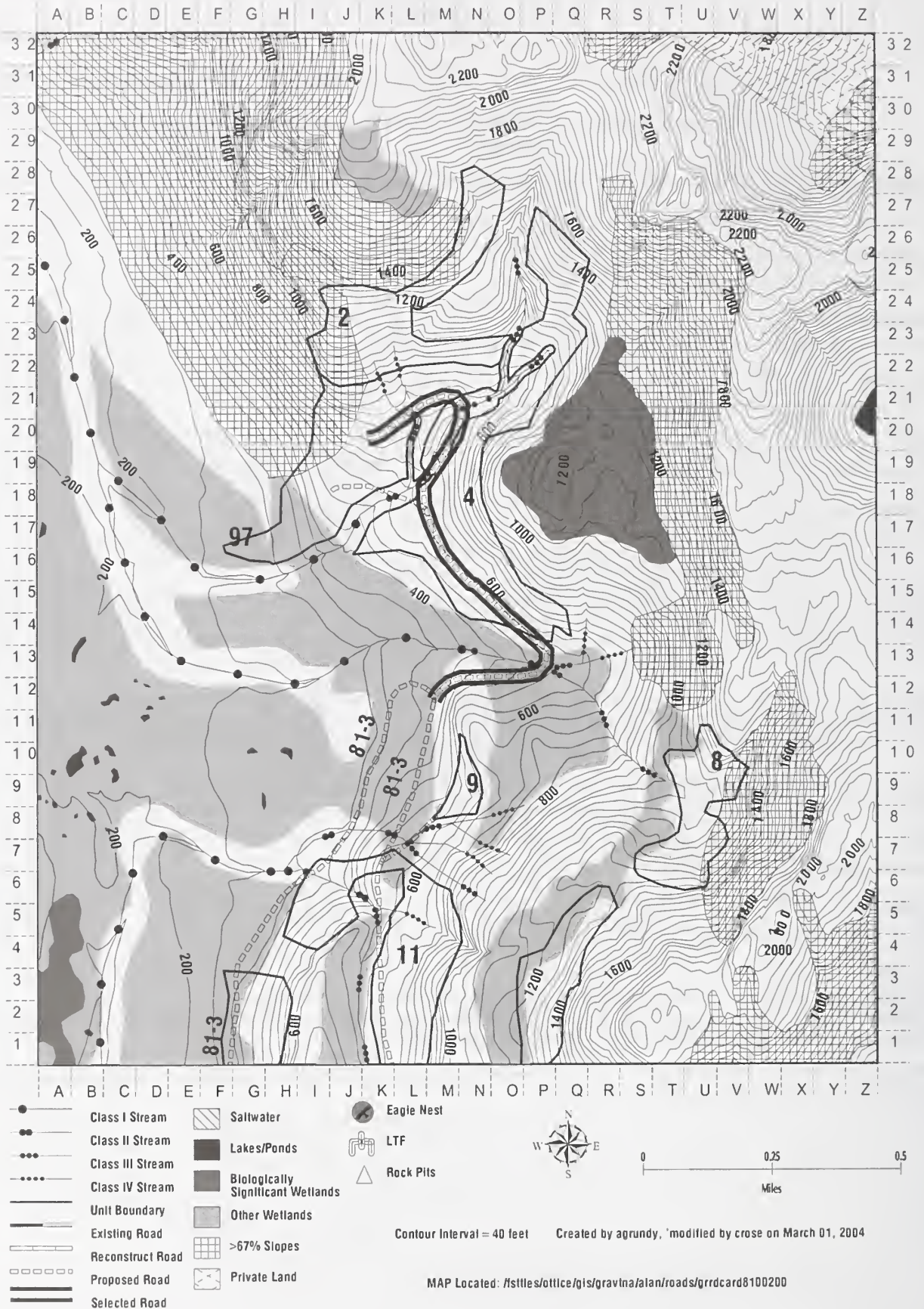
TIMBER:

This unit is designed for helicopter yarding.

WILDLIFE:

No resource concerns were identified.

Gravina FEIS Road Card 8100200



Road Management Objectives

Project/EIS	System	Land Use Designation	
Gravina	Gravina	TM	
Route No.	Route Name	Status	
8100200	Vallenar Bay	New Construction	
Begin Km.	Length (kilometers)	Begin Termini (km)	End Termini (km)
0.00	1.71 (Alts. 2, 4)	0.00	1.71 (Alts. 2, 4)
	1.02 (Alts. 3, 6)		1.02 (Alts. 3, 6)

General Design Criteria and Elements

Functional Class	Service Life	Traffic Service Level	Surface	Width	Critical Vehicle	Design Vehicle	Design Speed
L	LI	D	Rock	4.3 m	Log truck	Lowboy	10

Intended Purpose/Future Use: Road will be used for silvicultural activities. Road is to be closed after completion of silvicultural activities.

Maintenance Criteria

Operational Maintenance Level: 2

Objective Maintenance Level: 1

Maintenance Narrative: Road will be closed and put into storage status after completion of silvicultural activities.

Operation Criteria

Highway Safety Act: No

Jurisdiction: National Forest System ownership

AFRPR Status: Inactive

Travel Management Strategies:

Encourage:	N/A
Accept:	N/A
Discourage:	N/A
Prohibit:	N/A
Eliminate:	motorized vehicles

Travel Management Narrative: Road will be put into storage upon completion of silvicultural activities.

District Ranger Approval (signature) _____ **Date:** _____

Road Management Objectives

Site-specific Design Criteria

Road No. 8100200

Road Location: Road accesses Unit 2 (helicopter yarding) and Unit 4 (cable yarding) in the project area. LTF would be on private lands. Grades are favorable to 10 percent; construction difficulty is easy to moderate. Location is controlled by logging system constraints and stream crossings. Road does not cross any areas of 67 percent or greater sideslopes.

Wetlands: Road location is on wetlands (k.p. 0.06 to k.p. 0.40) but was located to avoid high-value wetlands areas wherever practicable. Alternatives to the location on wetlands could mean longer, higher-cost roads that would have greater impacts on similar areas of wetlands.

Erosion Control: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

Rock Pits: As shown on map, there are no major concerns. Rock source will be required near beginning of the road and will no doubt be on private lands. A commercial source of rock will be used for portions of road not on NFS lands until road accesses a rock source on NFS lands. Timing will be required on all blasting within one half mile of known eagle nests.

Resource Information (If applicable):

Timber/Logging: No resource concerns were identified.

Soils/Water: No resource concerns were identified.

Silviculture: No resource concerns were identified.

Wildlife/Botany: No resource concerns were identified.

Lands/Minerals/Geology/Karst: No resource concerns were identified.

Scenery/Recreation: No resource concerns were identified.

Heritage: No resource concerns were identified.

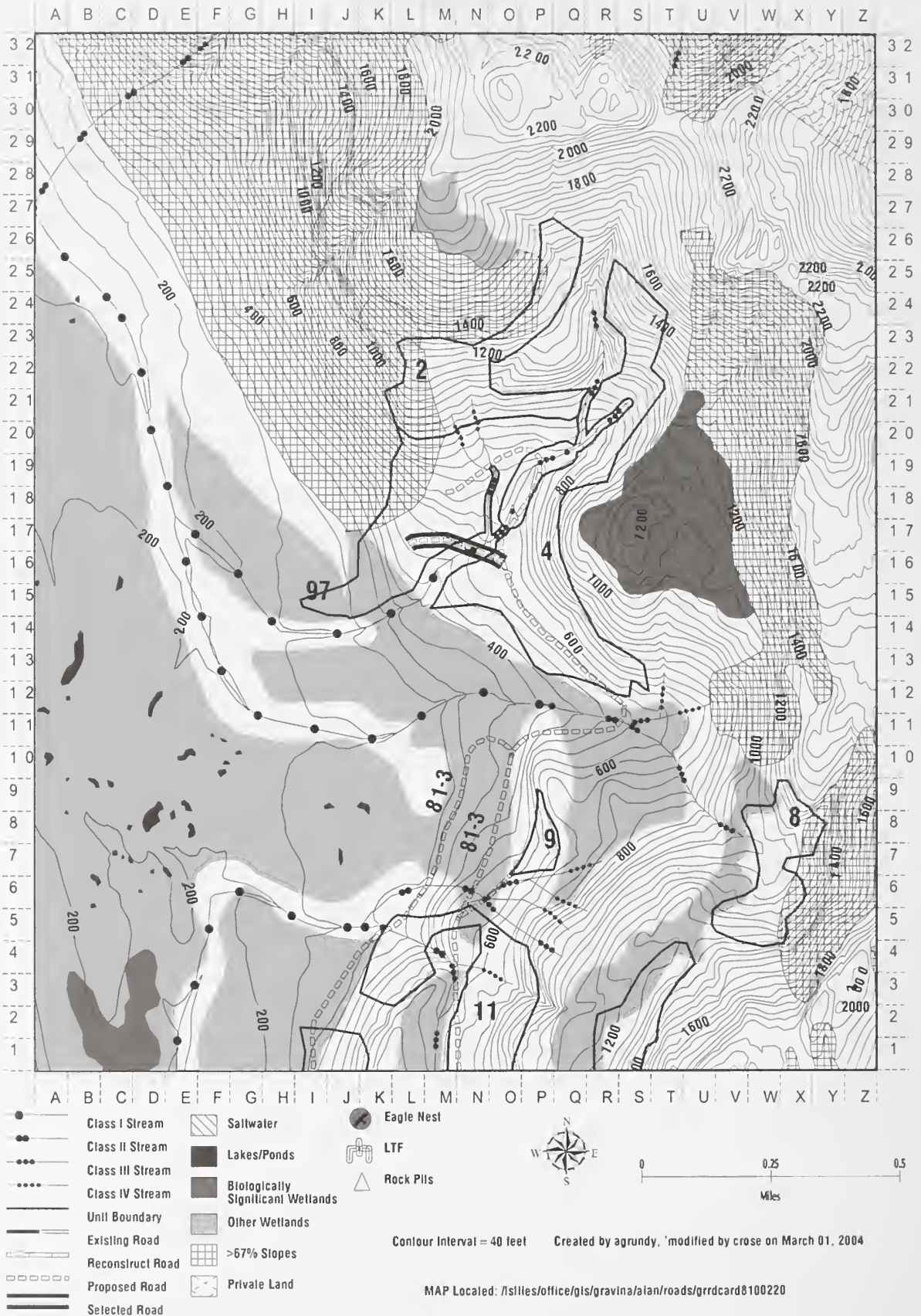
Road Management Objectives

Stream Crossings

Road No. 8100200

A.) Km 0.29 AHMU: Class II Channel Type: HC3 BF Width: 5m BF Depth: 0.3m Substrate: cobble/solid
Gradient: 8% Structure: Temp. Bridge Passage Req'd: Yes Timing Dates: No
Narrative: Due to the presence of resident fish, a temporary bridge is recommended to provide fish passage.

Gravina FEIS Road Card 8100220



Road Management Objectives

Project/EIS Gravina	System Gravina	Land Use Designation TM
Route No. 8100220	Route Name Vallenar Bay	Status New Construction
Begin Km 0.00	Length (kilometers) 0.19	Begin Termini (km) 0.00
		End Termini (km) 0.19

General Design Criteria and Elements

Functional Class L	Service Life LI	Traffic Service Level D	Surface Rock	Width 4.3 m	Critical Vehicle Log truck	Design Vehicle Lowboy	Design Speed 10
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Intended Purpose/Future Use: Silvicultural use, to be put in storage after completion of silvicultural uses. All drainage structures to be removed.

Maintenance Criteria

Operational Maintenance Level: 2

Objective Maintenance Level: 1

Maintenance Narrative: Road is expected to be closed and put into storage status after completion of silvicultural activities.

Operation Criteria

Highway Safety Act: No

Jurisdiction: National Forest System ownership

AFRPR Status: Closed

Travel Management Strategies:

Encourage:	N/A
Accept:	N/A
Discourage:	N/A
Prohibit:	N/A
Eliminate:	motorized vehicles

Travel Management Narrative: Road will be put into storage upon completion of silvicultural activities.

District Ranger Approval (signature) _____ **Date:** _____

Road Management Objectives

Site-specific Design Criteria

Road No. 8100220

Road Location: Road accesses Unit 97. Grades are favorable to 15 percent; construction difficulty is easy to moderate. Location controlled by logging system constraints and stream crossings. Road does not cross any areas of 67 percent or greater sideslopes.

Wetlands: Road location avoids all mapped wetlands. If wetlands are encountered in final road location, they will be avoided if practicable. Alternatives to the location on wetlands may mean longer, higher-cost roads that could have greater impacts on similar areas of wetlands.

Erosion Control: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

Rock Pits: As shown on map, no major concerns. Rock source will be required near beginning of the road and will no doubt be on private lands. A commercial source of rock will be used for portions of road not on NFS lands until road accesses a rock source on NFS lands. Timing will be required on all blasting within one half mile of known eagle nests.

Resource Information (If applicable):

Timber/Logging: No resource concerns were identified.

Soils/Water: No resource concerns were identified.

Silviculture: No resource concerns were identified.

Wildlife/Botany: No resource concerns were identified.

Lands/Minerals/Geology/Karst: No resource concerns were identified.

Scenery/Recreation: No resource concerns were identified.

Heritage: No resource concerns were identified.

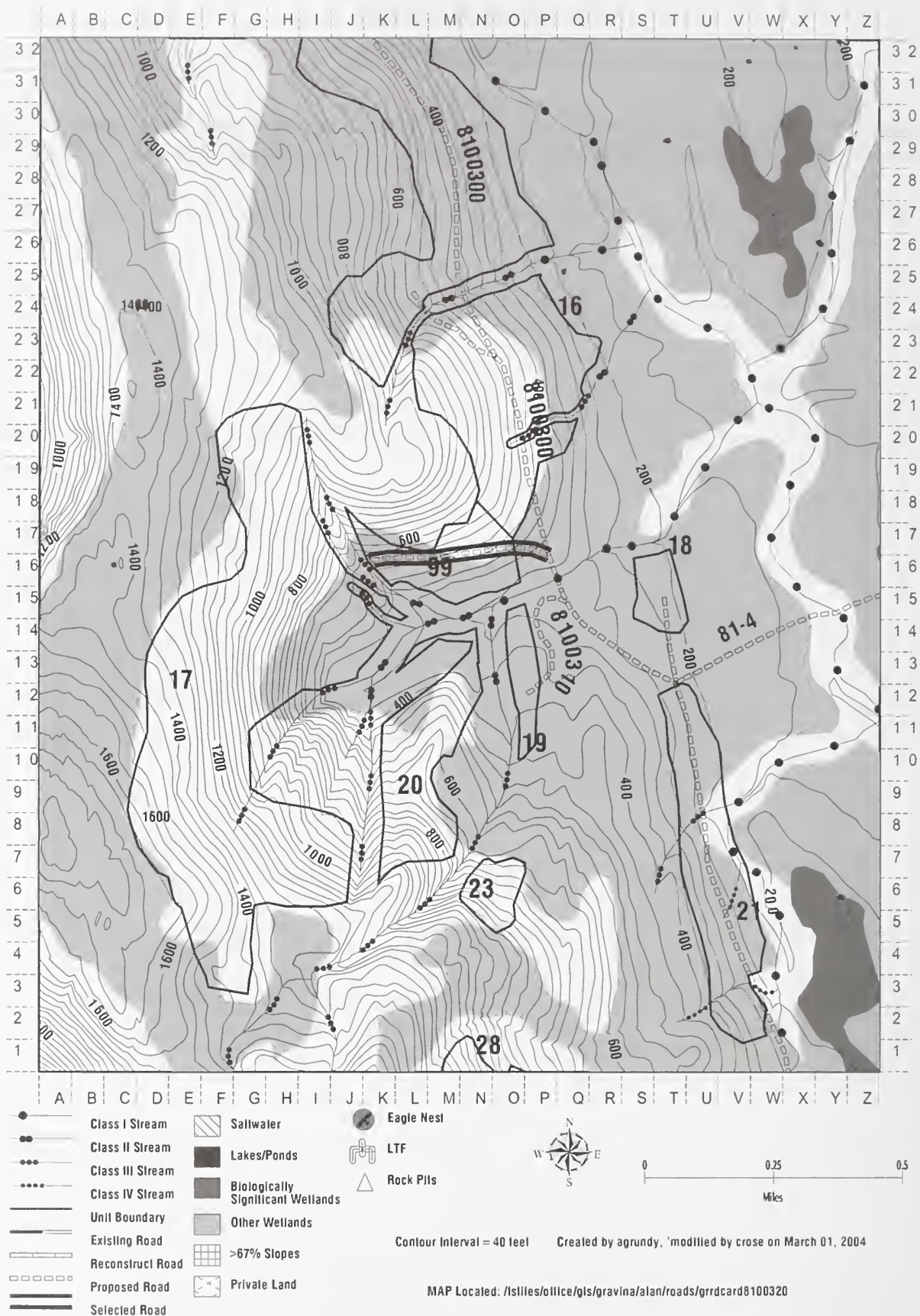
Road Management Objectives

Stream Crossings

Road No. 8100220

A.) Km 0.06 AHMU: Class II Channel Type: MMI BF Width: 2m BF Depth: 0.3m Substrate: cobble/solid H
Gradient: 3% Structure: 2100mm cmp Passage Req'd: Yes Timing Dates: No

Gravina FEIS Road Card 8100320



Road Management Objectives

Project/EIS	System	Land Use Designation	
Gravina	Gravina	TM	
Route No.	Route Name	Status	
8100320	W. Fk. Bostwick Bay spur no. 2	New Construction	
Begin Km	Length (kilometers)	Begin Termini (km)	End Termini (km)
0.00	0.56	0.00	0.56

General Design Criteria and Elements

Functional Class	Service Life	Traffic Service Level	Surface	Width	Critical Vehicle	Design Vehicle	Design Speed
L	LI	D	Rock	4.3 m	Log truck	Lowboy	10

Intended Purpose/Future Use: Uses include silvicultural and recreation use. Road is to be closed upon completion of silvicultural activities.

Maintenance Criteria

Operational Maintenance Level: 2

Objective Maintenance Level: 1

Maintenance Narrative: Road is to be closed upon completion of silvicultural activities, all drainage structures removed.

Operation Criteria

Highway Safety Act: Yes

Jurisdiction: National Forest System ownership

AFRPR Status: Closed

Travel Management Strategies:

Encourage:	recreation, hikers, bikers and berry pickers
Accept:	N/A
Discourage:	N/A
Prohibit:	motorized vehicles
Eliminate	N/A

Travel Management Narrative: Road will be put into storage upon completion of silvicultural activities.

District Ranger Approval (signature) _____ **Date:** _____

Road Management Objectives

Site-specific Design Criteria

Road No. 8100320

Road Location: Road access Unit 99. Location is controlled by logging systems, stream crossing along route, high-value wetlands avoidance location and local topography. It is recommended to end road at k.p. 0.56 to avoid three crossings near end in Unit 17.

Wetlands: Road location is entirely on wetlands but was located to avoid high-value wetlands areas wherever practicable. Alternatives to the location on wetlands would mean longer, higher-cost roads that could have greater impacts on similar areas of wetlands.

Erosion Control: Erosion control plan to be submitted by construction contractor, will meet all applicable BMPs.

Rock Pits: As shown on map, there are no major concerns. Rock source may be required near beginning of the road. A commercial source of rock may be used for portions of road. Timing will be required on all blasting within one half mile of known eagle nests.

Resource Information (If applicable):

Timber/Logging: No resource concerns were identified.

Soils/Water: No resource concerns were identified.

Silviculture: No resource concerns were identified.

Wildlife/Botany: No resource concerns were identified.

Lands/Minerals/Geology/Karst: No resource concerns were identified.

Scenery/Recreation: No resource concerns were identified.

Heritage: No resource concerns were identified.

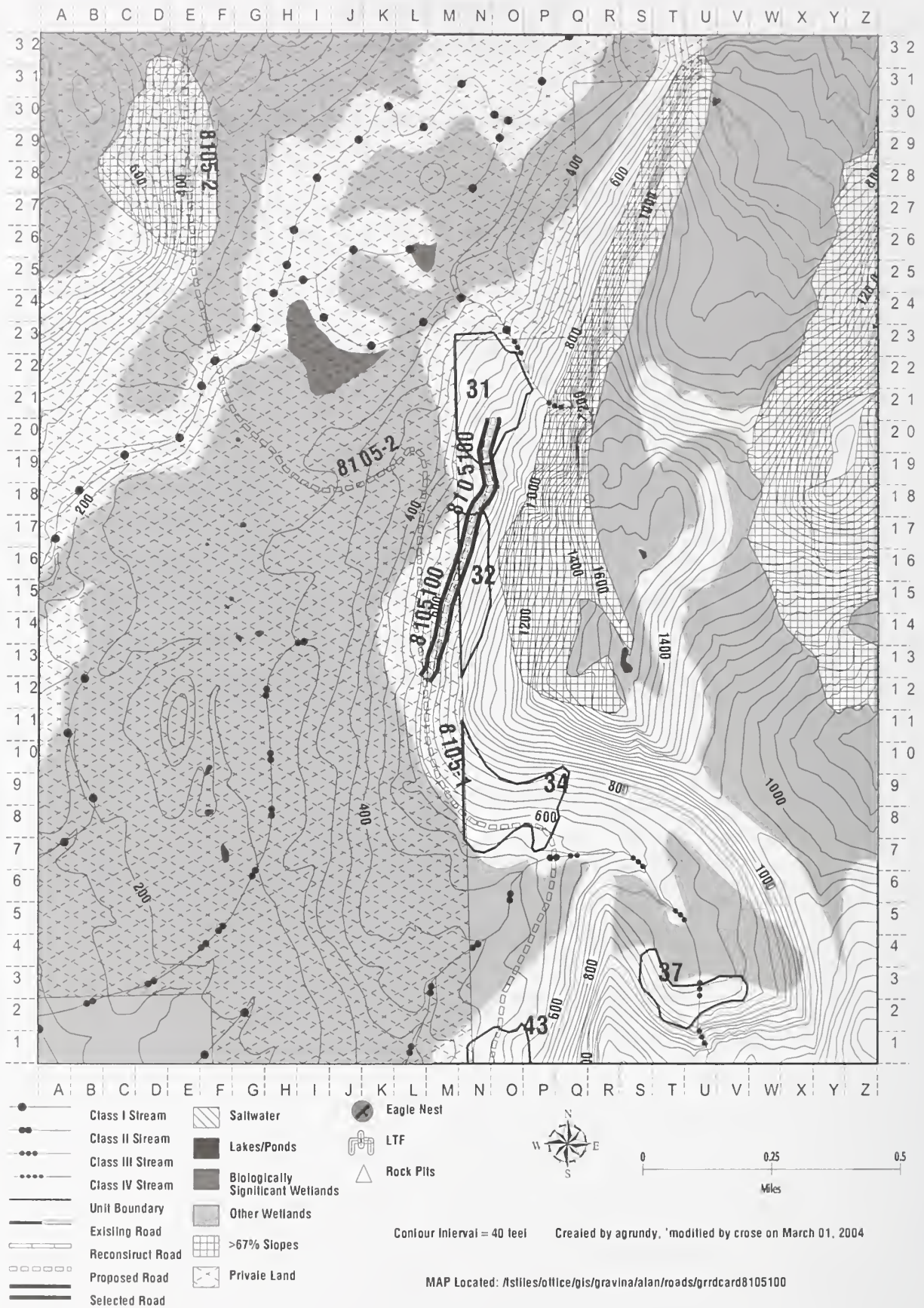
Road Management Objectives

Stream Crossings

Road No. 8100320

No stream crossings identified on this road

Gravina FEIS Road Card 8105100



Road Management Objectives

Project/EIS Gravina	System Gravina	Land Use Designation TM
Route No. 8105100	Route Name E. Bostwick Upper Spur	Status New Construction
Begin Km 0.00	Length (kilometers) 0.87	Begin Termini (km) 0.00
		End Termini (km) 0.87

General Design Criteria and Elements

Functional Class	Service Life	Traffic Service Level	Surface	Width	Critical Vehicle	Design Vehicle	Design Speed
L	LI	D	Rock	4.3 m	Log truck	Lowboy	10

Intended Purpose/Future Use: Uses include silvicultural and recreation use. Road is to be closed upon completion of silvicultural activities.

Maintenance Criteria

Operational Maintenance Level: 2

Objective Maintenance Level: 1

Maintenance Narrative: Road is to be closed upon completion of silvicultural activities, all drainage structures removed.

Operation Criteria

Highway Safety Act: Yes

Jurisdiction: National Forest System ownership

AFRPR Status: Closed

Travel Management Strategies:

Encourage:	recreation, hikers, bikers and berry pickers
Accept:	N/A
Discourage:	N/A
Prohibit:	motorized vehicles
Eliminate	N/A

Travel Management Narrative: Road will be put into storage upon completion of silvicultural activities.

District Ranger Approval (signature) _____ **Date:** _____

Road Management Objectives

Site Specific Design Criteria

Road No. 8105100

Road Location: Road accesses Units 31 and 32. Road grades favorable to 15 percent, construction difficulty moderate. Location controlled by logging systems, adjacent private lands, high-value wetlands avoidance and local topography.

Wetlands: Road location avoided mapped wetlands entirely.

Erosion Control: Erosion control plan to be submitted by construction contractor, will meet all applicable BMPs.

Rock Pits: As shown on map, no major concerns. Rock source may be required near beginning of the road. A commercial source of rock may be used for portions of road. Timing will be required on all blasting within one half mile of known eagle nests.

Resource Information (If applicable):

Timber/Logging: No resource concerns were identified.

Soils/Water: No resource concerns were identified.

Silviculture: No resource concerns were identified.

Wildlife/Botany: No resource concerns were identified.

Lands/Minerals/Geology/Karst: No resource concerns were identified.

Scenery/Recreation: No resource concerns were identified.

Heritage: No resource concerns were identified.

Road Management Objectives

Stream Crossings

Road No. 8105100

No stream crossings identified for this location.

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